FIRE ENGINEERING

A Consolidation of
FIRE AND WATER ENGINEERING *and* THE FIRE ENGINEER

MAY 16, 1928

When Buying Fire Hose

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What we
Have to
Say—

then—

Listen to
What others
Have to
Say—

then—

Do Your Own Thinking

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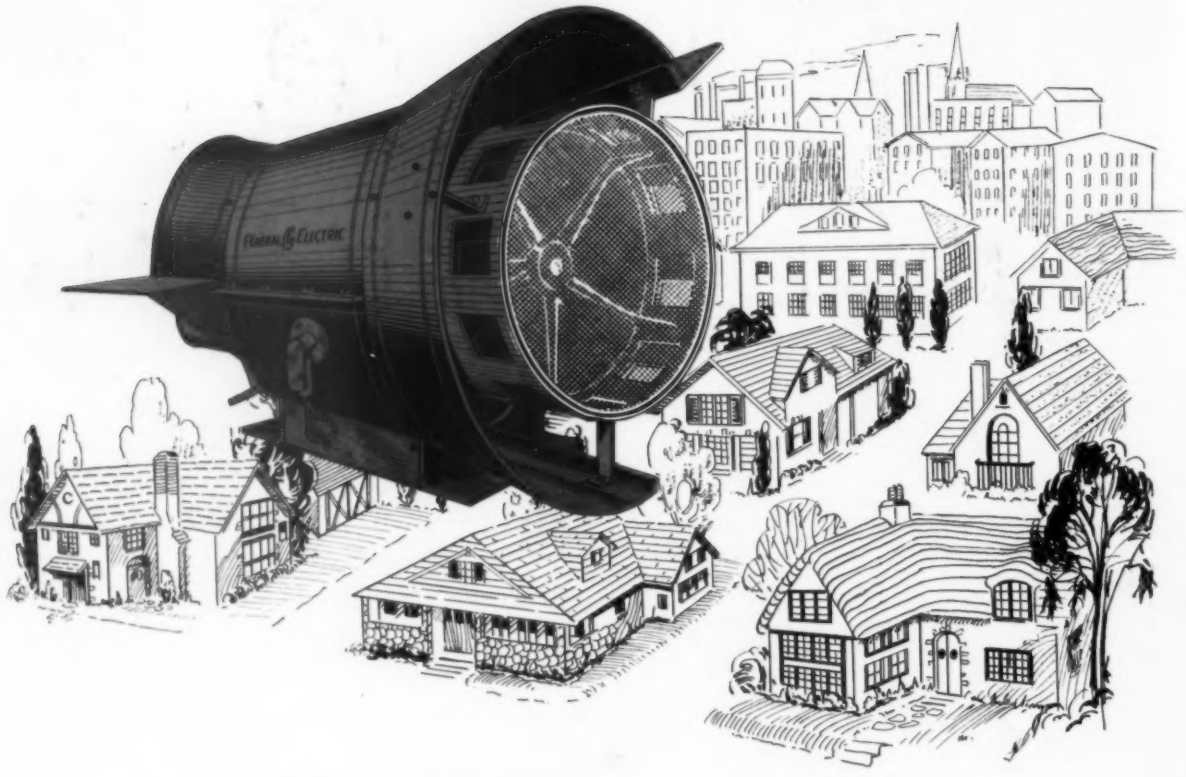

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FIRE ENGINEERING

A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER

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¶ Synthetic gin is said to have had something to do with Pat's difficulty. Can our readers suggest any more practical solution of the ever-present traffic problem?

The Publishers

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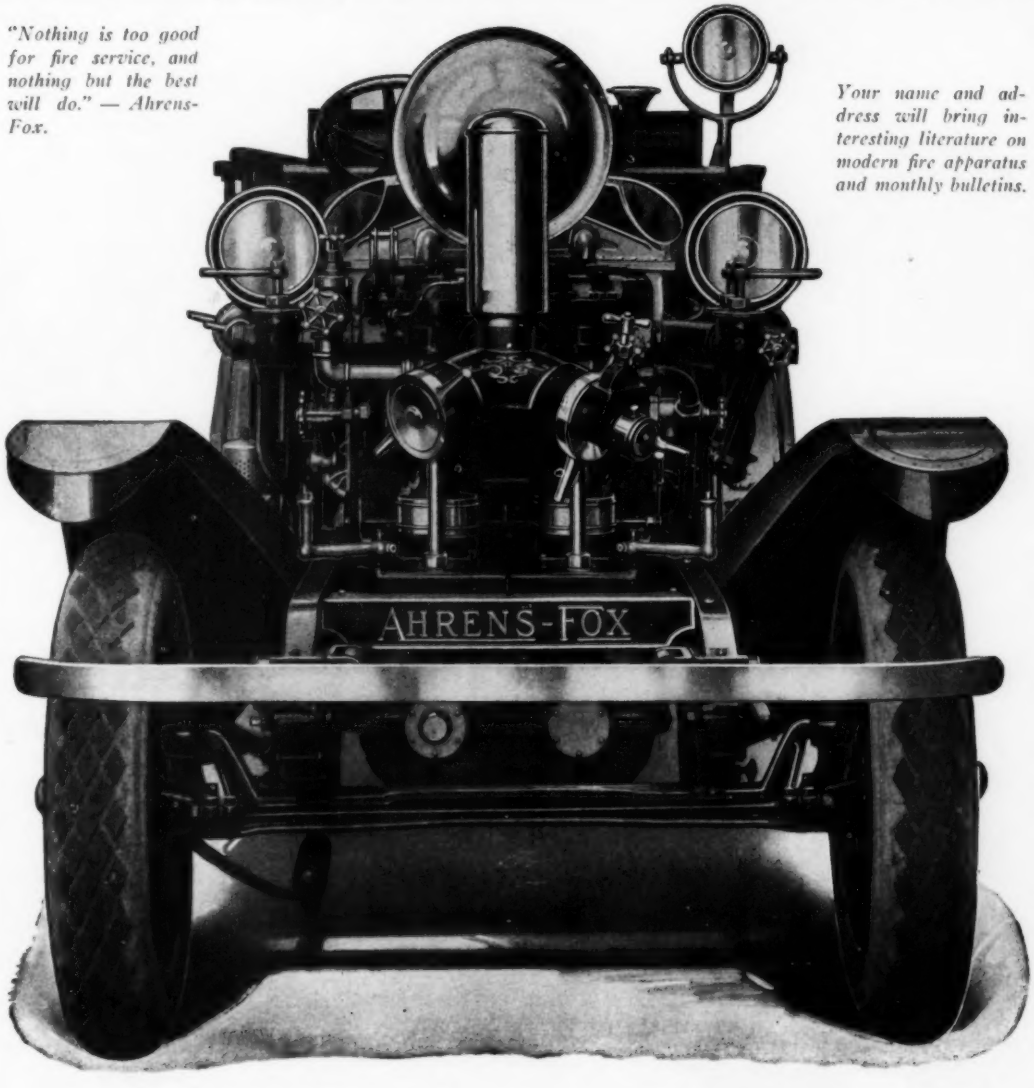

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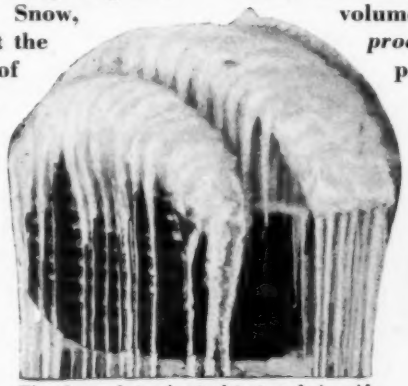

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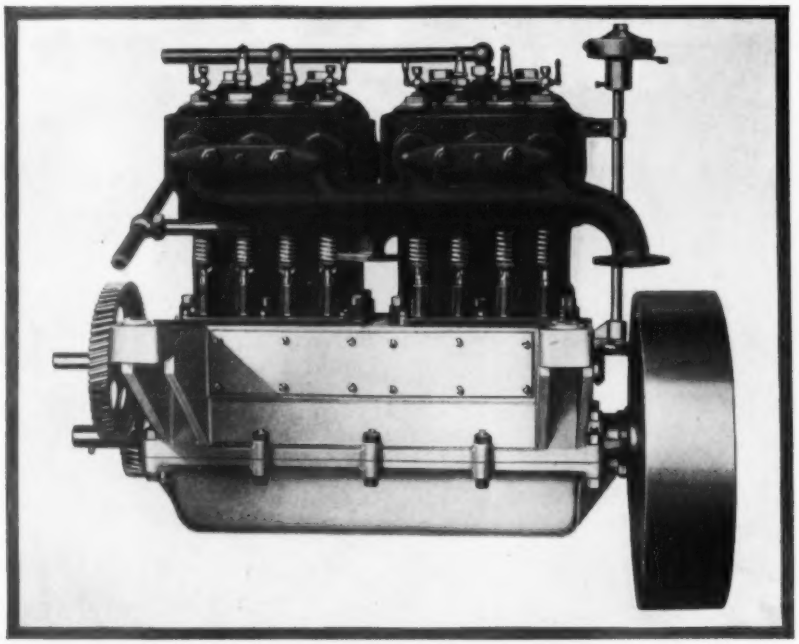

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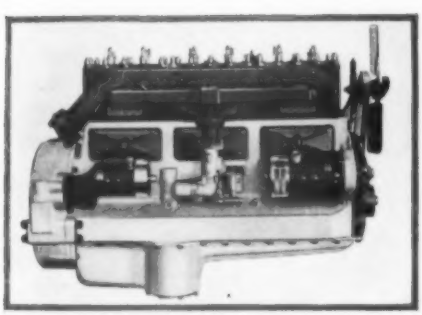

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To fully appreciate the progress that has been made in this art the small picture at left shows the present 120 *H. P. Waukesha pumping unit. Send for bulletin No.* 592 *giving full particulars.*

D-39-L

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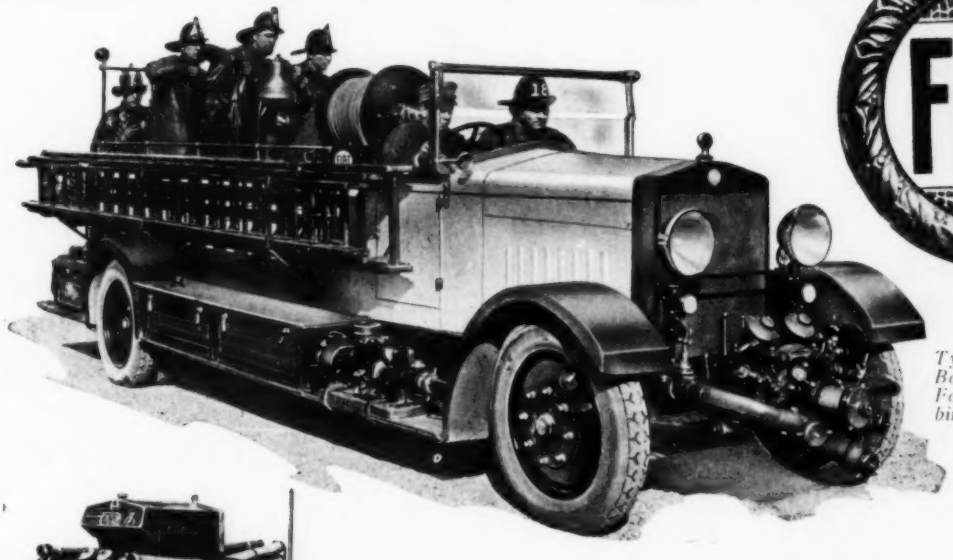

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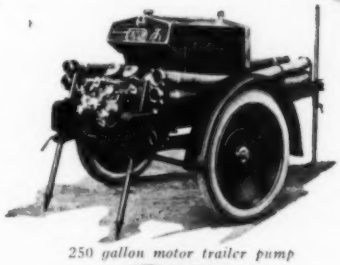

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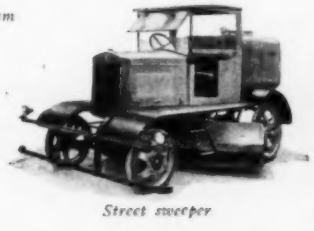
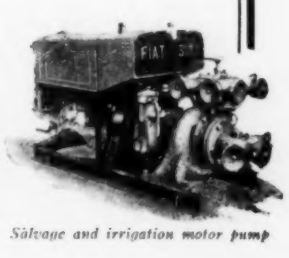
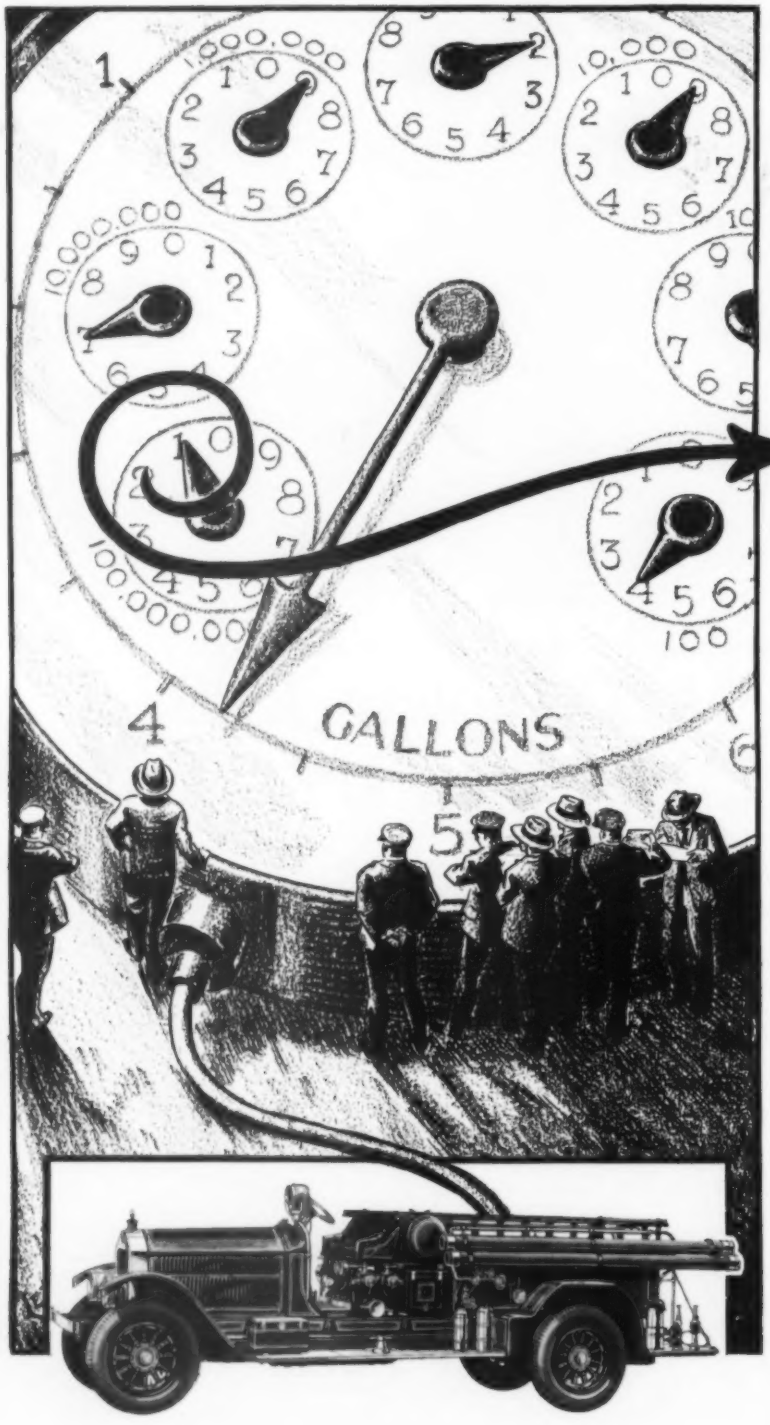


Street sweeper

A fire stream from sprinkling truck



Salvage and irrigation motor pump



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FIRE ENGINEERING

(A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER)

The Journal of the Fire Protection Profession

VOLUME LXXXI MAY 16, 1928 NUMBER 10

Who Should Pay for Exposure Fires?

Strictness of Laws in Foreign Countries as to Responsibility for Careless Fires—Important Effect on Fire Losses

By ELISHA FLAGG, New York City

IN Europe it has long been the custom to hold the person responsible who has a fire through his own carelessness. Not only so, but he must also, according to the laws of many of these countries, shoulder the damage his fire has caused to his innocent neighbor. If such statutes appeared on the books of the States there would undoubtedly be a big reduction in our fire losses. This author backs up his arguments along these lines by several quotations:

The destruction of life and property by fire is so well-known by every one, that it seems one of the most extraordinary cases of absolute apathy on the part of all of us that we have not taken direct interest in the most practical step toward its elimination; in other words done more toward the actual prevention of fires, which will reduce that destruction in a pronounced manner.

The consideration and application of protection against fire has been taken up by us, as it has by the entire civilized world, and about every preventative has been put into force; we also have, throughout the country, the finest and most up-to-date fire departments, yet with all this protection the destruction of property by fire has steadily increased. Without going into detailed figures the official report, taken from the National Board of Fire Underwriters' tabulations for the year 1925, shows the amount for the United States to be $559,428,858, breaking all previous records, and the report for 1926, not yet published, will exceed that of 1925 by $3,000,000.

Quoting from the Actuarial Bureau, January, 1927:

"If the image be ugly, why, then so is the subject, which is the yearly fire waste. The National Board of Fire Underwriters will be the first to congratulate the American people from whose co-operative endeavor alone such a blessing can flow".

This "co-operative endeavor" has been more clearly expressed by that Board's general manager to the writer, when he unequivocally approved this attempt to bring to the public's attention the importance of statutory enforcement of personal responsibility in fire loss. It is obvious that all fire departments would likewise endorse any practical plan that would reduce the number of fires. Such officials of the New York force who have been approached on the subject of *penalizing* are heartily in favor of it.

How About Personal Liability?

From 1901 to 1925, inclusive, the fire loss of the United States reached the overwhelming total of seven and a half billion dollars. We all calmly report our fires, no matter how excited we get at the time, and stand by while those magnificent fire-laddies go through the hazardous action of putting out a fire caused by a careless somebody! How about our individual responsibility in this little affair of destruction? Is it not possible that some one should be held responsible? It would seem that we are getting down to fundamentals when we ask that question. Symptomatic protection fades into the background for the moment.

The Code Napoleon on the Subject

There are those of us who read our histories who believe that Napoleon Buonaparte, in his constructive acts, deserved considerable credit, and especially do we admire his intellectual foresight in his readjustment of the ancient German and Roman laws, in the formation of what is now known as the Code Napoleon. In these French laws brought up to date, one will find either in the original or through translations, two little clauses from which we will quote:

"Responsibility of tenants for fire damages, under the French Civil Code, 1804, Article 1733:

"The tenant is responsible for fires, unless he is able to prove

"AS for the personal liability statute I believe it will be of more importance in reducing fires than any single piece of legislation. It is time we quit pitying people who have caused fires by their own carelessness. The only way to make people feel personally responsible as to fires is to hold them liable to the law."—John G. Gamber.

that the fire was accidental or due to circumstances beyond his control (force majeure) or due to faulty construction of the building or that the fire was communicated by a neighboring house".

"Article 1734, (Law of 1883):

"If there are several tenants in the building they are all responsible for a fire breaking out therein, in proportion to the income which the landlord receives from each of them as rental for their respective premises, unless they prove that the fire commenced in a particular apartment: in that case the tenant in whose apartment the fire commenced is alone responsible. If certain tenants prove that the fire could not have commenced in their apartments, those producing such proof are relieved from responsibility for the damage caused."

"A tenant in whose apartment fire breaks out, is fully responsible to the proprietor for total of damages to the building. This rigorous responsibility nevertheless ought to be limited to the building of which the tenant occupies a part".

"Damages caused as a result of fire to the buildings is regulated by the Common Law and should not be attributed to the tenant, except upon proof of the existence of a fault, negligence or imprudence on his part."

"There are other articles extending this law to detailed understandings through Supreme Court decisions, i.e: masters and employes are responsible for the damages caused by their servants or representatives. Teachers and workmen by their pupils and apprentices."

According to the directors of several insurance companies in Paris it appears that the laws concerning fire insurance are strictly enforced under Articles 1733 and 1734 Civil Code. In view of the considerable liability of the tenant in case of fire it would seem that the provisions of the present laws would naturally have a salutary effect in the prevention of fires.

Basis of Law in Latin and Teutonic Countries

Those two sections of the French Civil Code form the basis for the modern law in other Latin and Teutonic countries. Take Belgium, for instance—the Civil Code contains the following:

"Article 1382:

"Each one is responsible for the damage he causes, not only by his own acts but by his negligence and imprudence."

We find in Germany assessments against the party found responsible includes estimated costs to the city, of responding to fire alarms, extinguishing fires, damage to the furniture and property of innocent tenants and a fine of 500 marks as a reminder that laws are exacted for a purpose and carry substantial penalties for their violation. The German Penal Code (Das Strafgesetz fur das Deutsche Reiche) Article 368, provides for a fine of 60 marks maximum or 14 days imprisonment, maximum. Also the prohibition of the construction or removal of a fire-place without police permit—fire places must be kept in good order; entering premises with a light where combustible goods are; setting fire to anything that is near buildings or a forest; shooting near a forest or near buildings apt to conflagration; for not keeping fire-extinguishers in order. (Translated by the German Consulate, New York.)

The Law in Canada

Regarding Canada, a "Report of the National Fire Protective Association at the Annual Meeting at Ottawa, 1919," gives some information. The Dominion Fire Commissioner furnished information that showed a law had been passed for the Dominion of Canada which he claimed was the first country in the civilized world to have passed a bill of exactly that nature. It provides under the Criminal Code for the penalizing of carelessness or negligence in respect to fire. Any man who causes a fire by negligence is subject to a fine not exceeding $1,000 or imprisonment for a period not exceeding two years. And negligence is thus defined: "Any owner or occupant of property who has failed to maintain his property as provided by the laws of the community in which the property is located, etc., shall be deemed to be guilty of negligence."

Liability Statutes of Great Britain

In looking up the records of Great Britain, among the many statutes of that country, we have to go back to the reign of "good Queen Anne" and we find that in the year of 1708 it was enacted "that every servant by whose negligence or carelessness a fire should be occasioned should forfeit one hundred pounds ($500), or in default, be imprisoned and kept at hard labor during 18 months. Setting fire to a house wilfully was made a capital offense punishable with death."

This was certainly a strong start and no more than to be expected in those times; besides, a servant in the old law included employes and even tenants. Nevertheless, the law is older than that of any other country and as we copied the English law it was a great pity that this fire law was not included, modified to suit our times. The British law of 1774, No. 86 has as follows:

"Further enacted, no action, suit or process whatever, against any person in whose house . . . any fire shall accidentally begin, likewise no recompense. Note exception. The statute must be taken to apply to fires which are the result of chance or incapable of being traced to any cause, but not to fires which though they may be accidental as contra to wilful—are occasioned by negligence or want of reasonable care."

In a book, "Fires, Fire Engines and Fire Brigades,"

(*Continued on page* 426)

Charlotte, N. C., Opens New Fire Station

On April 4th the new Belmont fire station was formally opened at Charlotte, N. C. Hundreds of citizens visited the building and inspected it the evening of the reception. The structure is of Dutch colonial type and looks more like a residence than a fire station. The force of ten firemen and the equipment it houses will afford protection to that section of Charlotte known

Dutch Colonial Station Opened in Charlotte, N. C.

as the Belmont Plaza. The station will have one 750-gallon pumper triple combination truck.

A new $50,000 fire station is also planned for the Myers Park residential section of Charlotte. The city officials have experienced considerable trouble in finding a location for the Myers Park building. Numbers of sites have been selected, but each time some group of residents has objected and the city has been forced to continue the search. Finally, the city believes it has a site that Myers Park people will not object to. They were opposed to having a fire station erected in the midst of the handsome residences, although the homes were without fire protection.

D. G. SPENCER.

Standard Drills Best for Firemen

Importance of Systematic and Standardized Schooling—Severe Training of Mind and Body—Instruction Before Appointment

By CHIEF JOSEPH W. FISHER, Fire Department, Dubuque, Ia.*

IN this paper Chief Fisher emphasizes the importance of proper and systematic training for the Fire Department officers and men, along standard lines:

I am going to touch the high spots on the real inside work of the fire department. I came to Dubuque seven years ago at the request of the National Board of Fire Underwriters and on my arrival in Dubuque, City Manager Carr informed me that he wanted the fire department put on an efficient basis; then he said, "Can you do it?" "I can," I said. I did and today Dubuque has one of the finest departments of its size anywhere in the country.

Chief Joseph W. Fisher
Dubuque, Ia.

We have some fine apparatus and one of the finest personnels of any fire department in the United States, but we lack certain finishing touches to make us the department we should be, but I am sure the city council and city manager will come through on that.

To explain my ideas I would like to analyze the business of the fire department as I see it, "First, Men; Second, Training; Third, Housing Conditions and Salary."

Importance of First Class Personnel

The first thing necessary is to see that the department has a first class personnel, that the men selected to work in the department have the makings of high class men able to take orders, obey them and willing to learn.

In fire departments in most of our cities the men are selected through civil service and I am a firm believer in examinations for promotions, but such examinations should be conducted by officers of the fire department and not by civilians. The chief must look to his officers for results because the men working under them reflect in a large measure their general character and characteristics and aside from his ability to pass a promotional test, a man must have some qualifications for leadership to make a good officer.

Fire Fighting a Profession

In the old days a man could get himself on the department or get to be an officer through his pull, then pass as a hero by doing a lot of yelling in front of a burning building while the real firemen were inside putting out the fire. Those days are gone forever. Fire fighting has become a highly trained profession calling for highly trained men, possessed of active minds and bodies and officers who can lead their men in and tell them what to do.

Instruction Before Appointment

In these days and times it takes more than a blue shirt to make a fireman. Up to a few years back it was easy to join the fire department. In those days the candidate was assigned as a substitute in a regular man's place, or he would fill the place of some one that was sick or disabled and as soon as a vacancy occurred he would be placed on regular and a fireman's badge pinned on him. Then he was a fireman, but he knew nothing about fires or fire prevention. It was the theory that the captain of the company to which he was assigned would instruct him and that the older men would help him. Maybe they did and maybe they didn't, but the times have changed and so it it with fire fighting—it has become a science.

The old system of assigning a man to a station without his first being initiated into the hazardous and highly skillful game of fire fighting was wrong.

Where the Old System Failed

I will try to explain why it is wrong; take the green recruit who had just reported to the commanding officer of a station; if the captain or lieutenant in charge knew his business and if he had the knack of teaching others what he already knew, or if he had the kindness and patience that a trained officer should have, then the candidate was fortunate. But suppose that officer had forgotten what he knew through lack of actual experience? In those days there were no periodical examinations of men or officers to see if they kept in condition, or informed on the latest developments in fire fighting.

* From a paper read before the annual convention of the International City Managers Association, at Dubuque, Ia.

"THE old system of assigning a man to a station without his first being initiated into the hazardous and highly skillful game of fire fighting was wrong. Under the old system a man might learn six or seven ways of doing the same thing."

The officer could not teach what he had already forgotten, or perhaps never knew. Or again, we will suppose the captain and lieutenant were good teachers and taught their man and then the man was transferred to another station under a new captain who had a different way of doing things.

Advantages of Standard Drills

Under the old system one man might learn six or seven ways of doing the same thing, so one can readily see the advantage to be gained by standard drills. It prepares the new man to fill in any vacancy that may occur in the department.

But now we have the department drill school and no chances are taken. Here every candidate before being assigned to a station as a regular man must undergo rigid training for ninety days. If the recruit shows up weak he is taken out of training for a few days rest; then he sees the older men in action, which is enough to show him that it takes a real man to make a fireman and gradually his courage comes back, or he is done.

What the Fireman Is Taught

Under the standard system of drills the candidate is stripped of the fear of the civilian and the timidity of the novice; he is taught how to take hold of the ladder and he becomes sure of his footing and positive in his every act.

He is taught everything a fireman should know, when to do things, why to do them and how to do them; the theory is explained and then the practice performed. He memorizes the act and then gets his hands and feet to do it. The work is complete and merciless.

The candidate is run up the fire escape to the fourth floor and then run down only to be run up again in another position; he is taught how to strap a line of hose fast to a fire escape, how to take a ladder to the floor above or to the roof and when an axe is best in raising floor or opening a roof; in other words, he is taught a thousand and one things and everyone important, that a captain or lieutenant might forget in breaking in a green man at company quarters.

Severe and Thorough Training

Nothing is spared the candidate in his training period; he is taught how to rescue others; he is taught how to save himself and the lives of his fellow firemen. He must learn the department regulations. His training is thorough and at the end of the ninety days he is a real fireman. He is trained down physically and built up mentally with an understanding of the duties he will be called upon to perform. He stands equipped to respond to any emergency. This training of raw material is of course the chief object of the school.

Helping the Old Timers

But there are two other important functions which the school renders the department. It is all very well to instruct the new man, but what about him after he leaves the school and how about the man who joined the department before the school began, who had to learn it bit by bit the best he could. With the strict injunction that every man in the department must be thoroughly familiar with every phase of fire fighting, every so often the men as individuals and in companies report and go through the exercises of the school before the watchful eye of our drill master, Captain Ryan, a very competent officer.

But now do not understand me to say and mean that a school will turn out a finished fire fighter. This is wrong, but a man must have the actual experience on the fire ground connected with the school work to make him a finished product; so thanks to the drill school of today.

Inspections for Fire Hazards

I also would like to mention at this time the importance of inspections made by fire departments. To my way of thinking this brand of service has more to do with reducing the fire loss than any other means. "Fight the fire before it starts!" I believe every fire department should maintain an inspection bureau with the drill school.

In conclusion, it must be remembered that a department, as well as a city, is no greater than its men. Therefore, the greatest function of a good city manager is to select a first class chief and good men to support him if he expects to give his city and its taxpayers an efficient administration, which in financial terminology means "A dollar's worth of service for a dollar in pay."

I firmly believe that every city manager should secure for the members of the fire department a fair and adequate salary, to provide good working hours and housing conditions and to be just and firm in dealing with all department matters pertaining to the men, but to demand in return first class service.

CHIEF BAIRD OF FRESNO, CAL., PLANS TO RETIRE ON JULY 1

Has Been Twenty-Eight Years in Department—Pensioned in 1913 but Called Back in 1922 to Reorganize the Fire Department

BELIEVING that the task that he was called upon to accomplish has been done, Thomas Baird, head of the fire department at Fresno, Cal., has asked to be retired with a pension on July 1.

Chief Baird entered the city fire department on February 8, 1900 and remained in active service until October 13, 1913. He was pensioned at that time because of disabilities. On November 3, 1922, he was asked to head the department again in order to reorganize it.

Chief Thomas Baird

The department was greatly improved under the leadership of Chief Baird. It won the Ince Cup for excellence in fire-fighting and fire prevention on three different occasions.

In his request for retirement, Chief Baird stated that he believed that the job that he was called upon to do has been fulfilled. He said that the department was well trained, well organized and a highly efficient organization.

The Mayor granted Chief Baird a pension of $3,166.50, effective July 1, which is the legal pension based on his present yearly salary of $5,000.

He has been very active in the affairs of the Pacific Coast Association of Fire Chiefs and the International Association of Fire Chiefs.

At the beginning of this year, he was opposed to the city's plan of reducing the personnel of the department by twenty-six and of removing one company. Both he and the insurance organizations contended that the department was undermanned, and that men should be added instead of being removed.

It is believed that an examination will be held soon and the appointment of a new chief made from the list of eligibles.

Heavy Streams for Large Areas

High Ceiling and Inflammable Contents Make Small Streams Futile—Suggested Method of Handling the Fire

THE fire described in the last issue of this journal, in the series of articles on administration, was one which would have been worthy of the efforts of a metropolitan fire department.

A huge building 1,000 feet long, 165 feet wide, with no fire stops and crowded to the roof with farm implements both in crates and unpacked would make a blaze worthy of a big city fire force. In this case, however, three companies with practically the entire personnel made up of volunteers, were faced with the task of holding this fast spreading fire.

The town in which this fire occurred has a population of 7,800. It is located in the mid-west farming section and has a first class water system. The implement warehouse, the building involved in this fire, was located on the outskirts of the city and was supplied with fire protection by a single 6-inch main, having two hydrants alongside the implement warehouse. It was 1800 feet from the warehouse to the nearest cross connection with the city system.

Pressure in the main, except under heavy draft, was around 70 pounds. However, when two engines got operating on the two hydrants, the pressure dropped appreciably.

The Fire Department

The department, as noted above, consisted almost entirely of volunteers, there being but two men paid, the chief and one driver.

Engine Co. No. 1 was equipped with a triple combination machine, of 750 gallon capacity; Engine Co. No. 2, triple combination of 500 gallon capacity; Hose Co. No. 1, equipped with automobile hose car carrying 2,000 feet of hose.

The total enrolled membership in the department was about 150.

Description of Property Involved

The diagram herewith shows the layout of the plant and surrounding buildings.

The implement warehouse, as noted above, was 1,000 feet long and 165 feet wide.

Directly south of this building were a lumber yard well stocked with lumber; an artificial fertilizer works and a one story frame freight shed.

The fertilizer works was also of frame construction.

The implement warehouse was of brick construction with wooden roof covered over by "tin" sheathing and tar and gravel on top of this.

In the southeast corner of the warehouse was a heating plant and at the eastern end of the building, adjacent to the heating plant, was a coal storage yard well filled with coal at the time of the fire.

South of the fertilizer works was a group of frame dwellings and north of the implement warehouse were about 15 frame houses scattered over four blocks.

The Fire

The fire started about 7 o'clock on a still, cold March evening when the warehouse had just been filled to the doors with farm equipment. It was discovered by a clerk in the freight shed to the south and immediately reported to the fire department by telephone.

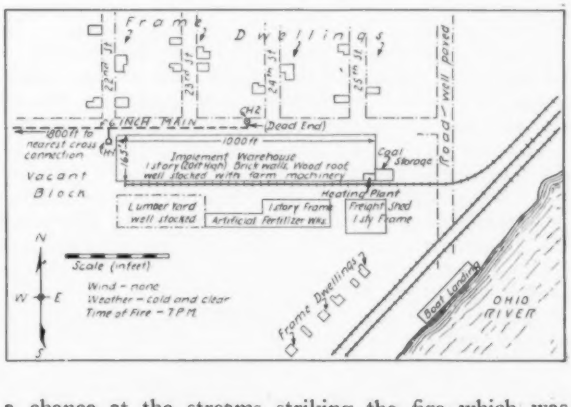
The three companies responded, all well manned by volunteers, and following the arrival of the apparatus a number of private cars rolled in carrying volunteer firemen.

The chief came with Engine Co. No. 1 and placed this engine at hydrant No. 2, ordering two lines stretched to the north side of the building into the fire. At the time of the arrival of the department fire had gained considerable headway in the eastern end of the implement warehouse, burning chiefly through the crates enclosing the farm implements. Up beneath the ceiling a bank of smoke had accumulated and it was apparent that it would be but a short time until the woodwork of the roof would take fire.

The heat was quite intense and the lines sent in from Engine Co. No. 1 were forced to remain at the doors and operate from this position.

Engine Co. No. 2 was stationed at hydrant No. 1, and a single line stretched through the west entrance to the implement warehouse.

This line proceeded into the building about 300 feet and due to the intense heat, had to operate low, taking



a chance at the streams striking the fire which was working its way through the great mass of farm equipment.

Members of Hose Co. No. 1 assisted in getting these lines in operation.

But no headway was apparent against the fire with this lineup. The great width of the building, the immense length, and the fast burning nature of the crates quickly illustrated the futility of the efforts of the department.

Futile Attempt to Check Fire

An attempt was made to check the fire in its progress through the equipment, but the fact that the department had to operate from a distance made it impossible to hold the blaze from spreading. In addition, the roof rafters were taking fire.

After operating for possibly 15 minutes in the manner described above, the chief ordered Engine Co. No. 1 moved to the boat landing southeast of the plant. Two lines were stretched from Engine Co. No. 1 and from

hydrant No. 2 two hydrant lines were stretched by members of Hose Co. No. 1, using the hose of this company.

Suggested Method of Handling the Fire

As noted in the article in the last issue, the nearest fire department was 42 miles away so that it would have been out of the question to have called for aid from this distance. Assuming the maximum speed of 50 miles an hour, it would have taken nearly an hour for apparatus to arrive and by that time the building would have been leveled.

The only chance the department would apparently have had to hold the fire was to get heavy streams in operation as quickly as possible to save the roof and to keep the fire in the east end of the big warehouse.

Placement of Engine Co. No. 1 would have been better at the boat landing rather than at hydrant No. 2, stretch in two lines to one of the south entrances of the warehouse and at this point put in operation 1½-inch nozzle. Even if the men had to operate from the door, they would have been able to reach the roof from the inside and cool off, at least to a partial degree, the intense heat accumulated beneath the roof, as well as around the burning equipment.

Place Engine No. 2 at hydrant No. 1 stretching in a single line with 1¼-inch nozzle. If this line is sufficiently short, good pressure can be maintained on it by Engine Co. No. 2. This second line to operate in wetting down the fire a distance and also in cooling off the roof. If the distance to be stretched is large, then two lines should be stretched and siamesed into a single line using a 1¼-inch nozzle.

Two hydrant lines may be stretched from hydrant No. 2 to operate at close range through windows or doorways onto fire near the east end of the building—at the north. These lines will be able to wet down burning material while the streams from the two engines can keep the roof intact and operate on the fire as well.

Opening up the roof at the east end will tend to draw the heat out at this section and confine the fire to that end of the building. If ventilation is not provided it is likely that the fire will spread, despite the efforts of the department, up beneath the roof and involve it its entire length. If any arrangement of lines, with the limited equipment available, can cope with this fire, it is believed that the above layout will accomplish the desired purpose.

New Jersey and New York Volunteers Meet

Seventy-five companies were present at the meeting of the New Jersey and New York Volunteer Firemen's Association held in Eureka Theatre, Hackensack, N. J., April 27.

Chief Shuttleworth, chairman of the Fire Prevention Committee, outlined the forest fire hazard and then introduced Calvin G. Lauber, engineer of the National Board of Fire Underwriters as the principal speaker. Mr. Lauber stressed the fire hazards in the forest and some of the methods used to extinguish such fires.

Chief Lambeck, manager of the Firemen's Home, presented an interesting report of conditions there. Capt. Wm. Paul Babcock of the Nyack, N. Y., Fire Patrol had a conference with the association officers in reference to salvage work and the establishment of a fireman's training school.

The annual convention will be held at Ridgefield Park, N. J., on Saturday, July 14, 1928.

Ft. Wayne, Ind., to Have New Fire Station—Contracts have been let for the construction of a new fire station in Fort Wayne, Ind.

Jamestown, N. Y., Has New Pumper—A 1,000-gallon Ahrens-Fox pumper has passed the Underwriters' test at Jamestown, N. Y.

New Method Found to Extinguish Fires

Catalysis, has just been added to the many known methods of fighting fire.

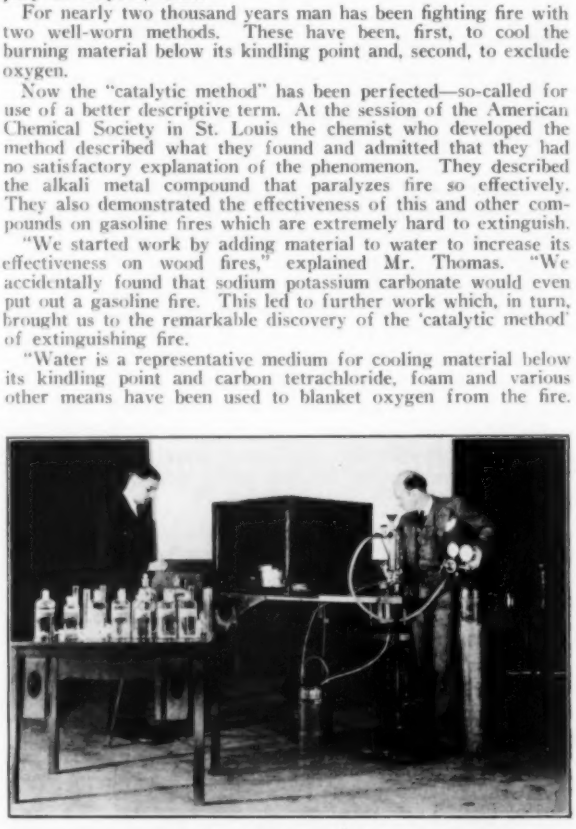
How this was discovered was somewhat of an accident in itself and the actual process that ensues is very much of a mystery, even to its discoverers. They are Charles Allen Thomas and Carroll A. Hochwalt, consulting chemists of the Fyr-Fyter Company of Dayton, Ohio.

For nearly two thousand years man has been fighting fire with two well-worn methods. These have been, first, to cool the burning material below its kindling point and, second, to exclude oxygen.

Now the "catalytic method" has been perfected—so-called for use of a better descriptive term. At the session of the American Chemical Society in St. Louis the chemist who developed the method described what they found and admitted that they had no satisfactory explanation of the phenomenon. They described the alkali metal compound that paralyzes fire so effectively. They also demonstrated the effectiveness of this and other compounds on gasoline fires which are extremely hard to extinguish.

"We started work by adding material to water to increase its effectiveness on wood fires," explained Mr. Thomas. "We accidentally found that sodium potassium carbonate would even put out a gasoline fire. This led to further work which, in turn, brought us to the remarkable discovery of the 'catalytic method' of extinguishing fire.

"Water is a representative medium for cooling material below its kindling point and carbon tetrachloride, foam and various other means have been used to blanket oxygen from the fire.



Experimenting With Catalytic Method of Fire-Fighting

Carroll A. Hochwait at left and Charles Allen Thompson at right, discoverers of catalytic method of extinguishing flames are shown in their laboratory. A fire started in the shield was extinguished in from nine to twelve seconds with the new system.

Yet this catalytic method neither cools nor blankets an oil fire.

"We discovered that a solution of sodium potassium carbonate extinguished an oil fire. We thought we knew why this compound put out the fire, namely, because the compound had given off carbon dioxide which blanketed the flame. Thus we thought that ammonium carbonate would work even better, since it decomposes much easier to carbon dioxide. We were greatly surprised when it did not work. Further work showed that this phenomenon resided with the potassium and that any water soluble compound which contained potassium, rubidium or caesium exhibited this remarkable result.

"After developing an apparatus for testing, it became possible to investigate the water soluble compounds for the presence of the same catalytic flame extinguishing property as is possessed by sodium potassium carbonate. With a few minor exceptions every element capable of forming a water soluble salt was studied. Practically all of the salts of the alkali metals exhibited this catalytic fire extinguishing effect.

"A peculiarly interesting point is the fact that all of the compounds of the alkali metals that have oxygen in them have a greater extinguishing effect than those without oxygen."

Mr. Thomas stated that the results of this discovery are now being utilized commercially in a one and three-quarter gallon fire extinguisher that has been passed by the Underwriters Laboratory of Chicago.

This new compound put out a fire built by the Underwriters Laboratory in from nine to twelve seconds, while the shortest extinguished fire with standard soda acid extinguisher is from thirty-five to forty-five seconds.

WITH THE EDITOR

Looting the Fire Station

It is a mean variety of thief who takes advantage of the absence of the firemen away at a blaze, to loot their station. This unfortunate occurrence was suffered by a volunteer fire company in a small Pennsylvania town recently. While the fire-fighters were absent in response to an alarm, the fire house was entered by the thief and a sum of money taken from a drawer. Not content with this, the fellow added insult to injury by "borrowing" a member's car, left parked in front of the station, to effect his getaway.

A volunteer fire department is particularly open to this sort of robbery, as there are rarely enough men to spare to allow of leaving a guard at the station during the unit's absence at a fire. The fire house, thus left unprotected, is naturally a fallow field for the thief, as of course most of the villagers are also at the fire and thus the thief has a pretty clear territory to make his investigations for plunder.

In paid fire departments of larger cities, one man is usually detailed to remain at the house to avoid any trespassing by undesirable visitors, although, even in these cases, there have been instances where a sneak thief has been able to ply his trade. Naturally, however, such cases are rare in occurrence.

The Parking Problem

The traffic situation in all cities of any size is one that is causing chiefs real anxiety. The steady and rapid increase in the number of automobile owners in this country promises to continue. One has only to take a short walk or ride in the public streets of any city to have the fact borne home to him in the number of new cars upon these streets.

One of the biggest of the problems in connection with this condition is that of the parking of automobiles. Whether strung along the curb, or projecting into the street, the parked car is a menace to the fire department and its apparatus. With such cars on both sides, or even on one side of the street, the room for the passage of the fire apparatus at high speed is badly restricted, and accidents are very apt to occur.

It is evident that the logical solution to the problem is the absolute prohibition of parking in the streets of the city. But practically this is an accomplishment that presents great difficulties. Transient visitors, and citizens who have shopping or business errands necessitating a short stoppage at the curb and the abandoning of the car for periods of varying length, of course, have certain rights. Their automobiles must be placed somewhere during their absence, and the street seems to them the only place available.

A plan has been devised which may eventually solve this problem, and even now offers to relieve very materially the congestion of parked autos in the public streets. This is the so-called "Community Garage." The scheme is to be tried in the Grand Central Station area of New York City in the form of a 24-story structure devoted entirely to the parking of automobiles. No doubt, with the successful carrying out of such a plan, structures of this kind will spring up in all parts of the big city, and will offer attractive places for the temporary parking of cars at a reasonable figure, free from the disadvantages and dangers of street parking.

With the success of the multi-story garage, which has been tried in several cities, many of the cars at present parked in the streets, will disappear from them, to be stored in these structures. This will greatly relieve the traffic situation and at the same time strengthen the feeling of security which the owners of such cars will have.

There seems little doubt that eventually laws will have to be passed compelling drivers of automobiles to park them in structures provided for the purpose either by the municipality, by contract or by private enterprise. When enough of such buildings have been erected to enable the complete removal of all parked cars from the street, the Millennium of traffic will surely have been reached!

The Passing of John Thompson

There passed away at Toronto, Canada, on April 18, an outstanding figure among the old-time chiefs of the American Continent, and a former President of the International Association of Fire Engineers. Chief John Thompson, formerly in command of the fire-fighting forces of Toronto, bore the distinction of being one of three chiefs from the Dominion of Canada who have been honored with the office of President of the Chiefs' Association.

The first of these was Chief Z. Benoit, of Montreal, who presided at the 1895 convention in Augusta, Ga., the second, Chief John Thompson, Toronto, who was in charge at the Milwaukee Convention in 1911, and the third, Chief James Armstrong, Kingston, Ont., President at the New Orleans, La., Convention, in 1926.

Chief Thompson will be remembered by his associates of that time as a man combining an attractive personality with excellent executive ability. He was a pleasing and able speaker, and as a presiding officer at the Fire

Chiefs' Convention, impressed all with his wisdom and capability.

He served his city and its Fire Department for the long period of forty years, sixteen of which he was at the head of the latter's affairs. The department under his guidance attained a high degree of efficiency. He was one of the first Canadian Chiefs to adopt the then new idea of motor propulsion for fire apparatus, and is said to have been the first to discard the horse-drawn buggy for a chief's car.

That he was not forgotten at the day of his death is attested by the fact that over a thousand citizens of his city and visiting members of fire departments paid their last respects to his memory at his funeral.

So pass the members of the Old Guard, but their young and vigorous successors carry on in the unending fight against Fire!

Garage Planned to Solve Parking Problem

There is scarcely a large city in the United States that is not faced with the problem of what to do with the large number of automobiles that are parked in the city streets for long periods of time. A certain area in New York City will soon have its parking troubles ended.

A 24-story community garage is to be erected a short distance from Third Avenue running through from Forty-Second to Forty-Third streets. The excavation is now being made, and the building is expected to be completed by next December. This garage is adjacent to the theatre section and will relieve the acute congestion that exists there during the evening performances.

New York City is not the only place that has considered the skyscraper garage. Other large cities are considering or are erecting garages many floors in height.

Fire Resistance of Concrete Brick Walls

Tests have been completed at the Bureau of Standards, Washington, D. C., on the fire protection, strength, and stability under fire conditions of brick walls.

Sand-lime and concrete bricks from two sources were included in each of the tests. The concrete bricks were such that they would have an average compressive strength flatwise of 2,800 pounds per square inch. The aggregate used for both the sand-lime and the concrete bricks was siliceous sand. The bricks were built into walls sixteen feet long and ten to eleven feet high for test in the large furnace, and they were erected four feet wide and four feet high for tests in the small furnace. Eight tests were made with walls of each size. Six walls were subjected to the fire and water tests.

The walls were laid with Portland cement-lime mortar consisting of 1:1¼:6 volume parts of cement, hydrated lime and dry sand, respectively, which was mixed with water to the consistency required by masons. Bricks were laid flat, as in common or running bond with one full header course for every five stretcher courses. The greater number of walls tested in the large furnace were built by a masonry contractor. Other walls were built by masons in the employ of the bureau.

The tests showed that for the restrained walls, cracks on the side away from the fire of over one-sixteenth inch in width were rare. For the unrestrained walls, cracks to five-eighths inch were formed in the eight-inch walls toward the end of the test. These were narrower or closed on the fire side. The headers were seldom cracked in the central portion of the wall so that the integrity as a building member was maintained.

Serious damage to the bricks was confined to those next to the fire except for tests lasting over six hours. Cracks parallel with the face of the wall were formed in some of the bricks from one-half to 1½-inch from the fire side. Hard bricks were more susceptible to cracking than the softer bricks although showing greater strength after the fire test.

Syracuse May Have Fire Prevention Bureau—Syracuse, N. Y., is considering the advisability of having a fire prevention bureau.

Chief Daley of Brockton Drowned

As this issue is going to press word has been received of the death of Chief William F. Daley of Brockton, Mass. A party of nine city officials and a guide were in a fishing boat on Moosehead Lake in Maine. Their craft struck a submerged log and sank. Only a police captain reached the shore three-quarters of a mile away.

Ex-Chief Thompson of Toronto Dead

John Thompson, formerly chief of the fire department of Toronto, Canada, and well known to chiefs throughout this country, died at the home of his daughter in Toronto, at the age of eighty-one.

He was born in County Antrim, Ireland, and came to this continent when nineteen years old. He joined the fire department on January 1, 1876 as foreman and was made deputy chief and later assistant chief within a very short time. In 1899 Mr. Thompson was made head of the department and continued in that office for sixteen years. He was a fire-fighter for forty years.

The Late John Thompson
Former I. A. F. E. President

Chief Thompson was the first chief in Canada to use the automobile in place of the horse-drawn buggy which officers used in going to fires. It was during his regime that the fine headquarters building was built and also arranged for special protection for the island by placing a fire boat in service.

He was a member of the Masons, the Orange Order and the International Association of Fire Chiefs. Chief Thompson was one time president of the latter organization. He is survived by three daughters and two sons. The present Deputy Chief George Sinclair is his son-in-law.

A private funeral service was held at his late residence in Toronto, Canada, and well known to chiefs throughout this territory where more than one thousand attended. A procession of more than 250 firemen in uniform marched in the funeral procession to St. James's Cemetery.

JOHN KARL LEE.

Carrying the Body of the Late Ex-Chief Thompson Into All Saints' Church

Questions and Answers

NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified.

Tar for Protecting Ropes

To the Editor:

Will you kindly answer through your Questions and Answers column the following question:

What is best kind of tar to put on ropes to protect them from rotting and how should it be applied.

I have used pitch pine with quite satisfactory results.

M. W. G.

Answer: We are indebted to the Wall Rope Works, Inc., of New York City for the following information on the above question.

The best tar to apply to a manila rope is a pine tar which has been produced either by the old process of kiln burning or by the retort process. The product known as coal tar such as is used for roofing, etc., should not be used on a rope, although this is sometimes done.

The method of applying is to heat the pine tar to approximately 160° and pass the rope slowly through the bath in order to insure proper penetration. It should then be placed in a "sweat-box" in order to let the tar work its way into the cells of the fibre.

The foregoing is the simplest way of applying the tar in the field, although the proper method is to use both heat and pressure and the vacuum process such as would be used by the manufacturer.

Discharge from Water Tower, Etc.

To the Editor:

Will you kindly answer the following questions for me, giving details on work in full?

1. An engine is pumping through three 100 foot lines of 2½ inch hose with a pressure of 140 pounds to a water tower, which is extended its full length or 55 feet. Tower is equipped with a 2 inch tip. What is the discharge from the nozzle?

2. Is it possible at any time to have more pressure at the nozzle than at the engine? If so, explain in detail.

3. In a hydraulic book I notice the following factors given: 4 inch standpipe 7.5; 5 inch standpipe 22; 6 inch standpipe 52. Explain how these factors are used?

Your courtesy in replying to the above will be appreciated.

N. E. F.

Answer 1: The first step in this problem is to combine your three lines of 2½ inch hose into a single line. This is done by dividing the three parallel lines by the factor 7.75. The average length of the three lines is 100 feet, and 100÷7.75=12.9 feet, the length of a single line of 2½ inch hose having the same friction loss as the 3 parallel lines of 2½ inch hose 100 feet long.

Before we can solve for nozzle pressure we must first deduct from the engine pressure two "losses" in the water tower. One of these is the friction in the water tower and the other is the "back pressure" due to the elevation of water in the tower up to the nozzle. Friction loss is taken at 25 pounds. The back pressure is determined by multiplying the elevation of the water in the tower by .434, or 55 x .434, giving us 23.9 pounds.

The total losses then will be 25 plus 23.9 or 48.9 pounds.

Deduct this from the 140 pounds engine pressure and you will have 91.1 pounds remaining for overcoming friction in the hose and giving nozzle pressure.

To find nozzle pressure after these deductions are made, we employ the Underwriters' formula:

$N. P. = E. P. \div (1.1 + K \times L)$

K, which is a factor depending upon the diameter of the hose and diameter of the nozzle, is 1.55 for 2½ inch hose and 2-inch nozzle.

L, the number of 50 foot lengths of hose in the line, is equal to 12.9 ÷ 50, or .258.

Then $N. P. = 91.1 \div (1.1 + 1.55 \times .258)$

$= 91.1 \div (1.1 + .3999)$

$= 91.1 \div 1.4999 = 60.7$ pounds nozzle pressure approximately.

Discharge is secured by formula: Discharge = 30 x diameter x diameter x √pressure

Discharge = 30 x 2 x 2 x √60.7 = 935 gallons per minute approximately.

Answer 2: The only time it would be possible to have more pressure at the nozzle than at the engine is when the nozzle is appreciably lower than the engine. For instance, if you are pumping down a long incline it would be possible in this case to have a greater pressure at the nozzle than you have at the engine—provided the static pressure created by the drop from the engine to the nozzle is greater than the friction loss in the line of hose.

Answer 3: The factors referred to are for changing the various sizes of standpipes into 2½ inch hose. For instance, if we had a 5 inch standpipe 220 feet in height, it would be equivalent to 10 feet of 2½ inch hose, from the standpoint of friction loss. To put it in other words, the friction loss for a given flow in 10 feet of 2½ inch hose would be approximately equal to that in 220 feet of 5-inch standpipe for the same flow. To use these factors we divide the length of the standpipe by the corresponding figure and the answer is in feet of 2½ inch hose.

Raising 55-foot Ladder

To the Editor:

Will you kindly answer the following question at an early date in FIRE ENGINEERING.

What are the correct orders to give in raising a 55-foot extension ladder after it has been placed on the ground.

S. D. W.

Answer: By the phrase "raising ladder after it has been placed on the ground" it is assumed that the questioner means after the ladder has been placed in front of the building with butt opposite window to which ladder is to be raised, with inside beam of ladder about twelve feet from the building.

The following is the method for raising a 55-foot extension ladder, and your orders should be such as to follow out this procedure.

Two men on the butt, four on the beams and two on the poles. The butt men release the poles and take their places standing on the bottom rung and squatting down, grasp third rung with both hands. Beam men then lift poles up off the ground and swing them over to the pole men. The beam men now lift the ladder up off the ground, get underneath it and start raising it hand over hand on the beams, waling toward the butt, as soon as the ladder is up high enough so that the pole men can push without moving the butt they push it up straight by pushing on the poles and running toward the butt. As soon as the ladder is up straight the butt men remove one foot from the ladder and place their hands up against the beams, the two beam men that are nearest the butt assume a similar position on the opposite side of the ladder, and the other two beam men step around and face the sides of the ladder, one on each side, and grasping beams with both hands. The pole men then move to the opposite side with the poles, the butt men and two men on the opposite side then face the building, lift the ladder up off the ground and take a quarter turn to the right and lower the ladder to its butt. In this operation the pole men move around to the left of the ladder as it is being turned, while the two men on the sides assist in keeping the ladder as straight as possible while it is up off the ground. The extension is then pulled up by the four men, and after it is locked in position, the ladder is laid in against the building by the pole man walking in toward the building, and beam men walking backward with their hands on the beams. When the top of ladder is against the building the pole men set their poles, and the rope is made fast at the bottom of the ladder by one of the beam men.

For lowering the ladder, reverse the above operations.

Valentine Fendrich Honored by Associates

Valentine Fendrich, chief of the Bureau of Fire Alarm Telegraph in New York City, was surprised by a testimonial dinner arranged in his honor on May 1 by over one hundred attaches of the fire alarm service. He was presented with a gold watch and chain and a medallion set with a large diamond—a replica of his official badge.

Valentine Fendrich

Fire Commissioner John J. Dorman made the presentation speech. He praised the work of Mr. Fendrich and told the fire alarm telegraph men that it was just as much their credit that the past ten years was such an epoch in fire alarm progress. Others who spoke included Dr. Harry M. Archer, honorary medical officer of the department, Alois J. Keogh, secretary to Mr. Dorman, Dr. John J. White and "Jerry" Daly. Several officials of branch central fire alarm telegraph stations praised the work of Mr. Fendrich.

During the past ten years, new fire alarm central operating offices were opened in the boroughs of Manhattan, Brooklyn, Bronx and Rockaway, and another new one in Queens is to be opened next month. Some idea of the progress made by the New York Fire Department in fire alarm expansion and improvement may be judged from the following:

1918		1928	% Inc.
3,267	Street boxes	6,318	93
260	Underground cable (m)	885	240
3,685	Underground conductor (m)	14,030	286
2,126	Aerial wire (m)	1,378	35*
143	Box circuits	413	300
47	Gong circuits	200	425
3,310	Total circuit miles	7,428	225
15,788	Alarms of fire	30,610	93
170	Personnel	229	35
$204,611	Budget	$586,407	186

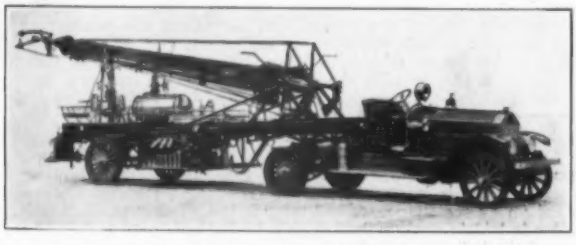
*Decrease. (m) Miles.

Chief Fendrich received his mechanical engineer degree from Stevens Institute of Technology in 1905 at which time he entered the service of the Western Electric Company, later going to the City Department of Water Supply, Gas and Electricity as an Assistant Electrical Engineer. On October 2, 1911, he was transferred to the Fire Department in the same capacity and on May 1, 1918 was designated Chief of the Fire Alarm Bureau which post he has held longer than any precedessor.

WM. JEROME DALY.

W. Racine, Wis., Asks for Fire Station—West Racine, Wis., has taken steps to have fire station established in that community.

Need Not Fight College Fires—Lansing and East Lansing, Mich., need not respond to fires in buildings of Michigan State College since the grounds are outside the city limits.



Utica to Have New Water Tower

New American-LaFrance water tower which will be delivered next August to the Fire Department of Utica, N. Y., of which J. N. Sullivan is Chief. The mast, which is constructed in three pieces, will have an extended length of 65 feet.

Chief Samuel Hunter Retired

Samuel F. Hunter, chief of the fire department in Springfield, Ohio, has retired after serving for twenty-four years. His retirement became effective on April 1.

He has moved to his old boyhood home town — Columbus, Indiana. At present Chief Hunter is enjoying a rest after so many years of active work. He expects to sell fire apparatus some time this fall.

Ex-Chief Samuel F. Hunter

Held on Arson Charges

A strong odor of kerosene, detected by Asst. Chief Harman of Scranton, Pa., at the time he rolled up to an apartment building, prompted the arrest of the owner of a saloon on a technical charge of "suspicion." In his report, Chief Harman stated that there was a strong odor of kerosene throughout the first floor. Officials of the department say that they have never witnessed a more conspicuous case of incendiarism. Oil was liberally sprinkled on the bar room floor and even the door was left partially open to insure a good draft for the fire.

The blaze was quickly extinguished within an half hour by chemical streams.

Richards, Fire Alarm Manufacturer, Dead

Edward C. Richard, a pioneer in the manufacture of fire alarms and automatic sprinklers, died at the Calumet Club in New York City as the result of heart disease.

He was born in New York seventy-one years ago of Colonial ancestry. He was educated at the Phillips Exeter Academy and at Harvard University where he graduated in 1878. Mr. Richards at once entered the fire alarm business and remained in it for half a century. For the last seventeen years he was president and manager of the Automatic Fire Alarm Company and president of the Consolidated Fire Alarm Company and the Boston Fire Alarm Company. He was a director of the General Extinguisher Company.

Mr. Richards was a member of the Calumet, Metropolitan and Harvard Clubs, Delta Kappa Epsilon fraternity, Phillips Exeter Academy Association, Sons of Colonial Wars and Sons of the Revolution, Merchants Association and the National Fire Protection Association.

Funeral services were held in St. Bartholomew's Church. His widow, a sister, two nephews and a niece survive.

Fire Losses in Boston Reduced

Fire Commissioner Eugene C. Hultman, of Boston, Mass., reports that the Boston fire loss for 1927 was reduced 29 per cent over the previous year or $1,500,000.

The total fire loss for 1927 in the City of Boston amounted to $3,694,641, which was $1,505,324 or approximately 29 per cent less than the loss for 1926, and $1,712,429 or approximately 32 per cent less than the loss for 1925. There has been also a reduction in the number of alarms. In 1927 the department responded to a total of 7,332 alarms of fire, which is 538 or 6 per cent less than in 1926. On a per capita basis the fire loss in Boston has been reduced $2.17 since 1925.

During the past year and one-half constant study and consideration has been given to improved methods of fire fighting in the department. New appliances have been introduced and others improved. Improved drills have been introduced and many other changes have been made to increase the efficiency of both men and apparatus.

Greater efforts have been directed towards fire prevention than ever before.

HARRY BELKNAP.

MURIATIC ACID FUMES HAMPER FIREMEN IN STUBBORN BOSTON BLAZE

Heavy Damage to Five-Story Brick Structure in Smoky Fire—Four Alarms Sounded—Several Firemen Injured

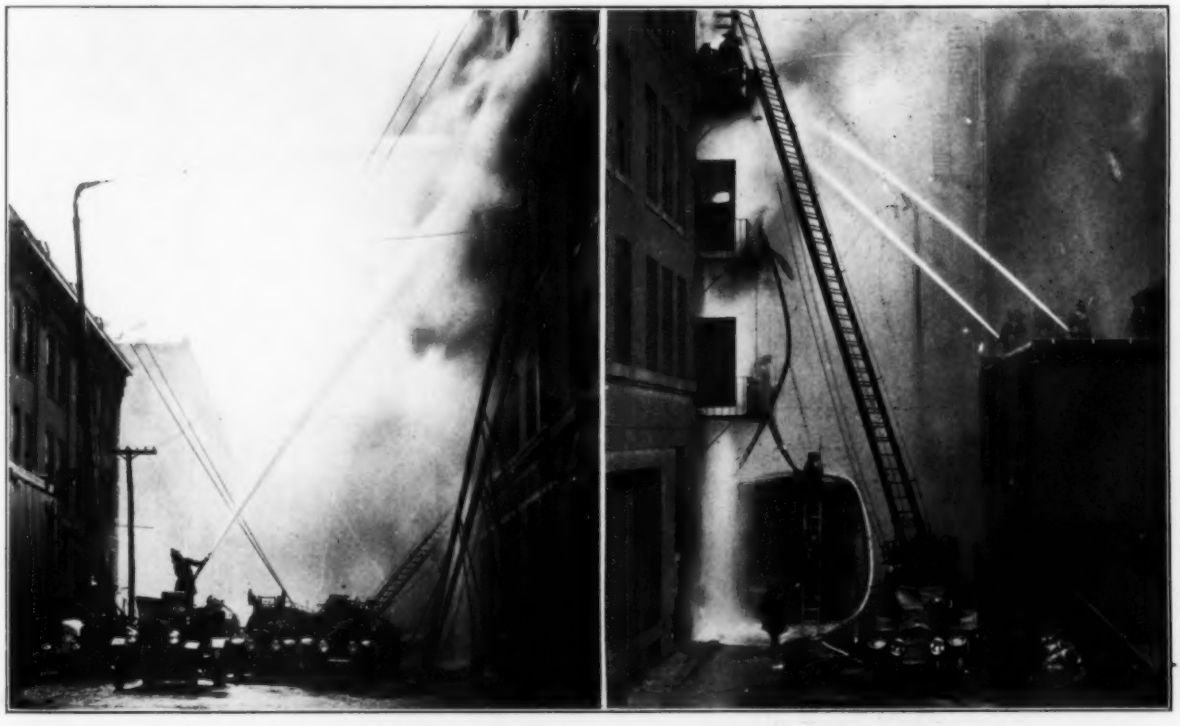
FOUR alarms were sounded in rapid succession on the morning of April 28 for a fire which gave the Boston, Mass., Fire Department a stubborn battle for several hours and caused heavy damage in the 5-story brick building at South Boston, occupied by the Colonial Can Company.

Acting Chief of Department Henry A. Fox directed the companies and was assisted by Deputy Chiefs Henry J. Power and Thomas H. Downey. The blaze was discovered by a fireman on house watch in the quarters of Water Tower No. 3 and Hook and Ladder Company No. 18 on Pittsburgh Street, diagonally opposite the burning building. These companies responded at once and an alarm was immediately turned in from a fire alarm box. Engine 39 was at the scene within a minute and District Chief Michael Silva ordered a second alarm at 5:30 A. M., one minute after the first alarm. A third alarm was ordered at 5:33 and a fourth at 5:48.

Dense clouds of smoke rolled out of the building. The entire fourth floor was a raging furnace as Morse wagon guns and tower streams swung into action. Hose lines were taken over a fire escape in a rear alley and to the roofs of nearby buildings. Other lines were taken over stairways and up ladders. Two water tower streams were used, one in the front and one in the rear, and several Eastman deluge sets were operated to advantage. The flames spread to the fifth floor and also to the third floor where it is believed the fire originated. There was an easterly gale and pelting rain; the wind aided the fire and made extinguishment more difficult. Seven firemen were injured and men working on the fire escapes suffered from muriatic acid fumes in the heavy smoke. There was forty-five pounds pressure at the many hydrants which were well spaced.

The "all out" signal was given at 10:03 A. M., but a detail of men and apparatus was kept at the scene all day for overhauling.

HARRY BELKNAP.



Five-Story Brick Can Factory in South Boston Developed Into a Four-Alarm Stubborn Fire.

Triadelphia, W. Va., Considers Purchase—Triadelphia, W. Va., is considering the purchase of fire apparatus.

FANNED BY WIND, FIRE DESTROYS BUSINESS PLACES IN PEKIN, ILL.

Blaze Started in Garage at Rear of Hotel—Firemen Forced to Abandon Hose Lines—Hampered by Shortage of Hose—Loss Large

By SIDNEY L. ULRICH

STARTING at 3:30 in the morning in a garage in the rear of the Illinois hotel, and aided by a stiff southeast wind, fire soon spread to a lumber yard and several houses in Pekin, Ill. Only the prompt arrival of fire apparatus from Peoria, Ill., saved other buildings in the section.

Fire was discovered by a night watchman, and an alarm turned in. Guests in the hotel were warned and cleared from their rooms in scanty attire.

The blaze jumped from the alley to the lumber yard nearby, and cleared the half block occupied by that firm, in a few minutes. A hurry call was sent to Peoria for aid. Peoria sent a 750-gallon Seagrave pumper and a Packard hose car. When these outside companies rolled in, the lumber yard was all ablaze. Four lines were laid in the alley to the rear of the mill and this is where the fire was checked.

The water pressure was so good that Pekin did not have to use their pumper. Thirteen lines were used with nozzles ranging from ⅞-inch to 1½-inch.

The blaze spread so rapidly that firemen were forced to abandon hose lines in the lumber yard.

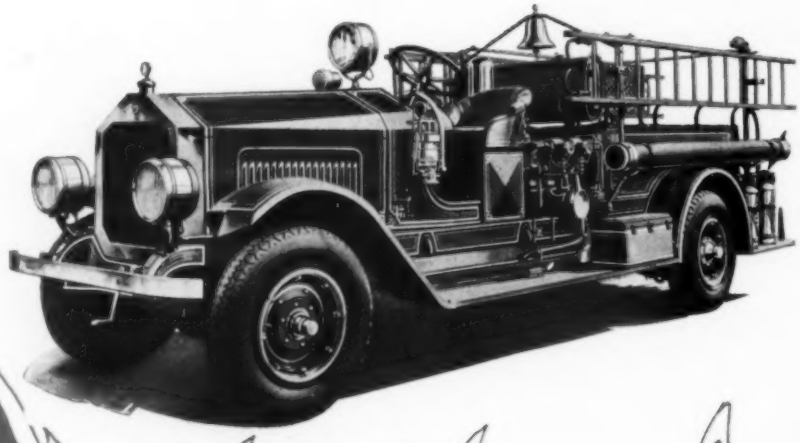
One fireman was trapped by an explosion of paints and oils, but he was guided to safety.

Buildings across the alley from the planing mill started smouldering. Hose lines were run through a restaurant to another street to block the flames in that direction. The fire department was hampered by a shortage of hose.

The fire was brought under control eight hours after it had started. The Pekin department consists of twelve paid firemen and twenty-five call men. Help was also secured from the local American Legion chapter.

The fire damage is very large. The loss to the lumber company is estimated at from $120,000 to $125,000. To this must be added the loss suffered by several merchants, the Illinois hotel and the garage. Total damage is estimated at from $150,000 to $200,000.

Announcing ~ a NEW MAXIM



"FOMON EQUIPPED" is the last word in Maxim apparatus—a unit of fire protection complete in itself, including the very latest of Fomon protection against oil and other flammable-liquid fires.

Through an arrangement with the American Fomon Company any Maxim unit may be completely foam equipped, either with portable generator or with a built-in system of any magnitude and capacity required.

Maxim recognizes the value of foam equipment and the superiority of the Fomon two chemical non-deteriorating principle. In keeping with all other attachments and equipment always of the highest order with Maxim, we have made careful study of this foam process and endorse and recommend it for use with any Maxim apparatus.

Make your next unit a Maxim—"with Fomon."

Maxim Motor Company

Middleboro, Massachusetts

the last word in fire protection "with FOMON"

Fire Department Type Fomon Generator (also made in Industrial Type — Underwriters' approved)

The Fomon Foam Type Fire Department Extinguisher designed to be carried on fire apparatus.

"with Fomon" today means the latest in fire protection to those who *know* such protection. It means:

Chemicals and other equipment listed as standard by Underwriters' Laboratories.

A system adopted by leading apparatus manufacturers as an integral part of their equipment.

Non-deteriorating chemicals—because *separated* the FOMON *way* chemicals *cannot* deteriorate or act on one another.

More and better quality foam, because absolutely no inert "filler" material is needed as used to keep active elements (packed separately the FOMON way) apart.

Ingenious packing of chemicals together so as to open with one operation and pour together in right proportion.

Portability—flexibility—adaptability, to meet the changing conditions of actual fires.

Simplicity of operation of generator—requiring practically no attention other than the feeding of chemicals—a one man job.

The above are but a few of the many reasons why your apparatus should be "FOMON EQUIPPED."

Write for full details, prices, etc.

American Fomon Company

"Fomon—Fire Out"

1005 Drexel Building Philadelphia, Pa.

Representatives and stocks in the principal cities

School House Destroyed in Scranton

Three alarms were necessary before a fire which broke out in a school in Scranton, Pa., was brought under control. Five firemen were injured, more than twelve overcome by smoke, and property valued at $200,000 destroyed.

Fortunately the fire occurred at a time when the children were out of the building. Otherwise, it is believed that there might have been a high loss of life. The one who discovered the blaze telephoned the information to the department, and a box alarm followed. Within five minutes, a second alarm was turned in which brought out Chief Peter J. Rosar and additional companies. As the flames spread a third alarm was sounded.

Floors showed signs of giving way. Firemen who had ventured inside the building were ordered back. Even though there was a possibility that the walls might collapse, firemen who were directing streams from all four sides, worked close up to the walls.

The school was built thirty-seven years ago. The building was of brick construction with four rooms on each of the floors. The last school building fire in the city happened fifteen years ago.

There were nineteen companies working at this fire; four 750-gallon pumpers, one 900-gallon pumper and two 1,000-gallon pumpers, nine hose trucks, one 85-foot aerial ladder, one 75-foot aerial ladder and a city service truck.

Aerial Ladder in Use at the Benjamin Franklin School in Scranton, Pa.

In all 9,750 feet of 2½-inch and 1,000 feet of 3-inch rubber lined hose were used. The department placed a total of 659 feet of ladders in position.

Panama Has Excellent Fire Loss Record

Although hampered by a large amount of tinder-box construction in the congested section, Chief Juan Antonie Guizado and his fire department has been successful in keeping down the year's fire loss to the surprisingly low figure of $8,703. There is a great fire hazard from the local practice of many cooking on primitive charcoal braziers in Panama.

Chief Guizado is now advocating the removal of the government power storehouse to a more remote location, and a safer method for transporting explosives.

Dedham, Mass., to Buy Apparatus—Dedham, Mass., has appropriated $10,000 for the purchase of apparatus to be located in East Dedham.

Life Lost at Atlantic City Hotel Fire

One person died and eight were injured when fire trapped ninety-eight guests in the Iroquois Hotel on South Carolina avenue, Atlantic City, N. J., recently. The fire started in the kitchen of the seven-story frame and brick building and spread so quickly that many of the guests had to be guided to safety.

The hotel was in the heart of the side street hotel section. When the fire was discovered, employees of the hotel went through the halls trying to rouse the guests but many slept on until awakened by the smoke. Then there was a mad rush to windows and loud shouting for help.

Firemen were unable to raise their ladders because of flames

Fighting the Fire in the Wood and Brick Constructed Hotel Iroquois in Atlantic City, N. J.

shooting out from windows. They told a girl and her father to jump into a life net below. Both were severely injured from the jump. Five firemen were injured when the upper three stories of the hotel crashed down. The front wall buckled and fell into the street.

The damage to the hotel was estimated at $300,000.

WHAT'S BURNING

THE following list includes fires of $25,000 loss and over in the United States and Canada, for the periods designated in the headings. These figures, compiled from telegraphic reports, are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousands.

Week Ending May 4

KIRON, IOWA.—Grain elevator destroyed..... 25
ST. CROIX FALLS, WISC.—Dept. Store of A. D. Barros..... 40
PUTNAM, CONN.—E. C. Kinney Coal & Lumber Yard..... 40
MERIDIAN, LA.—Sawmill of Meridian Lumber Co..... 200
LAWRENCE, MASS.—Grain elevator of Lawrence Grain Co.... 45
FITZGERALD, GA.—Stock of Fitzgerald Bargin Store..... 25
CLIFTON, N. J.—Plant of Howe Paper Box Co..... 80
PATERSON, N. J.—Linn Dept. store destroyed..... 200
TORONTO, ONT.—Business firms in Acme Bldg..... 125
WYOMING, ILL.—South side grade school damaged..... 40
OTTAWA, ONT.—Store of Ketchum Co. Ltd., adj. property.... 80
PHILADELPHIA, PA.—Finkelman Bros. property, 5th & Market 25
DIXON, ILL.—Administration bldg. Nachusa Lutheran Orphanage 25
ELKHART, IND.—Fishley-Brown Furniture Store..... 50
GREEN BAY, WIS.—Plant of Green Bay Specialty Co..... 30
MENOMONEE FALLS, WIS.—Plant of Menomonee Falls Mfg. Co 45
SUFFOLK, VA.—Hub Dept. Store, Washington Sq..... 50
SAN FRANCISCO, CAL.—Torino Bakery, York & 23 rd St.... 30
GREAT FALLS, S. C.—Residence of F. E. Vantine..... 40
PORTSMOUTH, OHIO—Building of Dove Company damaged.. 160
MEDIA, PA.—Residence, A. E. Barlow, Concord Township..... 25
LOVELL, WYO.—Main building, Salem Co-operative Glass Co.. 160
FULTON, MO.—Wilcox Studio and adjoining property..... 25
MERAUX, LA.—Property of Sinclair Refining Co..... 80
PROVIDENCE, R. I.—Reynolds Bldg., Weybosset St..... 40
KINGSTON, PA.—W. J. Brennan business and apartment bldg.. 50

(*Continued on page 426*)

Boston Opens New Central Station

The formal opening of the new Central Fire Station on Broadway, between Shawmut Avenue and Washington Street, Boston, Mass., took place on April 17 with Mayor Malcolm E. Nichols, Fire Commissioner Eugene C. Hultman, and Chief Daniel F. Sennott officiating.

The building is erected on property located on Broadway and extending through to Warrenton street.

J. M. Gray Company, the architects, have designed a building eighty-four feet wide by one hundred and five feet long, three stories in height of fireproof construction, embodying all the modern requirements of a building of this character.

The Broadway facade is of limestone with granite base and boldly finished first story terminating in a balcony of stone at the second floor line. The apparatus enters through four large arched doors flanked by secondary doors to stair halls. The rear of the building facing Warrenton street is of gray mottled brick with limestone cornice and trim.

The first floor contains a large apparatus room, forty eight feet wide by seventy-three feet long, with a clear floor space free of columns, and walls wainscoted in glazed brick with a buff color brick above. Adjoining this is the Chief's apparatus room, nineteen feet wide by forty feet long. Directly connected to the apparatus room is a work shop opening onto Warrenton street with supply and storage rooms. Three staircases of steel with tiled walls lead to the upper floors and basement.

The second floor contains Chief's offices, officers' rooms and officers' Hall with toilets and showers adjoining. The rear portion of the second floor is devoted to locker rooms, toilets and showers for the privates.

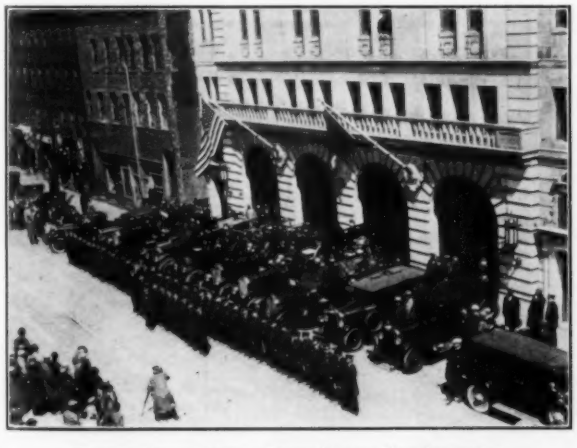
On the third floor on the Broadway front of the building is a large recreation hall forty feet square with stage and moving picture booth, adjoining the hall is a study room, dining room and kitchen. Rooms for assistant chief and aids to chief, two large dormitories with boot rooms and storage rooms complete this floor.

In designing the dormitories and locker rooms, the architects have recognized the two platoon system by providing separate rooms for each platoon.

On the roof is a large tiled surface provided for recreation during the summer months.

The basement contains heating apparatus, hose racks, laundry, drying room and storage.

The contract was awarded to John B. Dolan of Boston on March 3, 1927, for the sum of $210,550.00 and the building was entirely completed for this amount.



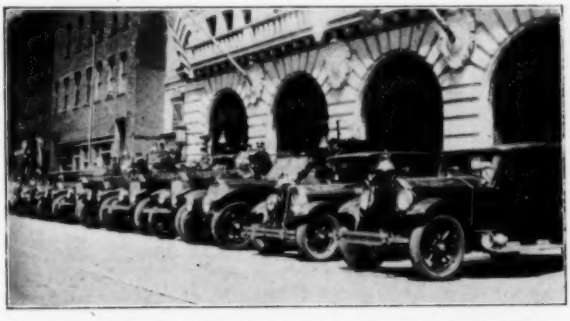
Boston Opens New Central Fire Headquarters

The new central fire headquarters in Boston, Mass., has been formally opened. The station is fitted with all modern conveniences and accessories. It houses three tenders, two chemical engines, a water tower, ladder truck, ambulance, and three battalion chiefs' cars. The firemen are here lined up in front of their new station at the formal opening and dedication ceremonies.

The sum of $420,360.68 was appropriated for land and buildings, and the entire cost of land, buildings and all other charges amounted to $320,645.98 showing a saving of $99,714.70.

The following apparatus has been installed in the house: Engine Company No. 26, consisting of a 1000 gallon American-LaFrance motor pumping engine which carries 1000 feet of hose and a Type 75 American-LaFrance combination hose and chemical carrying 1200 feet of hose and equipped with Morse wagon gun; Engine Company No. 35, 750 gallon American-LaFrance pumper and hose car and Type 75 American-LaFrance combination hose and chemical; Rescue Company No. 1, squad wagon mounted on Pierce Arrow chassis and carrying complete rescue tools and appliances; Water Tower No. 2, a 55 ft. tower and Morse gun with 4 wheeled American-LaFrance tractor; car for chief of District 5, a Chandler sedan with special body; car of Assistant Chief Henry A. Fox, a Buick touring car; and Chief Sennott's car, a Chandler Royal Sedan.

On the day of the opening of the station motion pictures were made of the apparatus on a test run to Park Square and return, the Mayor and Fire Commissioner making the trip on one of the machines. A warning light and siren have been placed on a post directly opposite the firehouse to give notice to traffic when the apparatus is about to leave quarters.



Apparatus Quartered in New Headquarters Station in Boston

The new building replaces the old Mason Street firehouse which was demolished to make way for the construction of the new B. F. Keith Memorial Theatre.

HARRY BELKNAP.

CORRESPONDENCE

Windshields on Fire Trucks

To the Editor:

In an issue of FIRE ENGINEERING, mention was made of windshields for fire apparatus. Here in Henryetta, Okla., we have windshields on all our fire apparatus and they have proven very satisfactory.

I specified windshields when advertising for bids on apparatus. Usually the specifications are made up by some city clerk or mayor who knows little or nothing of the needs of the department. The manufacturer likes to reserve the space required for the windshield for mounting the bell, searchlight and hand siren. Such devices work just as efficiently when mounted in back of the driver's seat.

The fellow who objects to windshields because the driver may get hurt in a wreck by broken glass will purchase a car for himself and his family that has the broken glass hazard that he objected to for fire apparatus. Not only that but he will equip the car with glass on both sides and rear and drive the car at a much greater speed than that used by the fire department. There are hundreds of private automobile wrecks to one fire apparatus accident.

Following my order, Chicago had placed an order for twenty-five pieces equipped with windshields. These trucks were delivered September, 1922.

I am proud to be a subscriber to your journal and I get many good points from each issue.

Yours very truly,
S. C. BOAZ, Chief.
Henryetta, Okla.

Gulfport, Miss., Has New Apparatus—A Dodge truck on which was mounted a fire department chassis, has been placed in service in Gulfport, Miss.

Green Bay, Wis., to Rechase Hose Threads—Hose and hydrant threads in Green Bay, Wis., will be rechased to that of the National standard. The work is being done by members of the fire department.

Firemen Have Police Powers—Denison, Ia., has been troubled by motorists racing apparatus to fires. The chief has warned the public that firemen while on duty have police powers and will arrest those interferring with the duties of the department.

Firemen Should Know Flag Courtesies

Conventions are now taking place in various sections of the country. Such gatherings mean parades, decorated cards, flags displayed over the fire houses, and a gala attire for the entire town. But so few know how to properly display the flag, or the courtesy and respect that should be given it, that the Veterans of Foreign Wars have issued complete information on this subject. It is reproduced here through the courtesy of the ex-soldiers.

A colored sheet containing this information has been distributed to all the fire stations in New York City for display.

It is easy to forget things. Perhaps, therefore, it might be well to post this page in the company office so that when next time the department has a parade or some public observance, the arrangement committee will know how to display the U. S. flag on the fire apparatus, at the speaker's stand, or elsewhere.

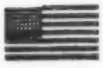


Plate 1

Our flag should always have stars to the left of the picture, fabric floating to the right.

Plate 2

When hanging with the stripes in a vertical position against the wall, as shown in the picture, the stars should be in the upper left hand corner.

Plate 3

When our flag is carried with other flags in parade it should always claim the place of honor—at the right.

Plate 4

When flown at half-staff, the Flag should be hoisted to the peak for an instant and then lowered to the half-staff position; but before lowering the Flag for the day it should be raised again to the peak. On Memorial Day, May 30th, the Flag is displayed at half-staff from sunrise until noon and at full staff from noon until sunset.

Plate 5

Our Flag must not be used as a table cloth, nothing but the BIBLE can rest upon it.

Plate 6

Never place our flag in position of this illustration, below the seats on a platform or stand, or twisted in any fancy shape whatever.

Plate 7

To honor the passing of our Flag, when in civilian clothes stand at attention and place the hat with the right hand over the left breast. If in uniform execute the right hand salute.

Plate 8

No other flag should be hoisted above OUR FLAG except a church pennant, which is allowed to fly at the masthead above the stars and stripes when religious services are in progress in a military chapel or aboard a ship of our navy.

Plate 9

When flags of two or more Nations are displayed they should be flown from separate staffs of the same height and the flags should be of approximately equal size.

Plate 10

Bunting of the National colors should be used for covering a speaker's desk or draping over the front of a platform and for decorations in general. The blue stripe should always be placed uppermost and the red at the bottom.

Plate 11

When used on a speaker's platform, the Flag, if displayed flat, should be displayed above and behind the speaker. If flown from a staff, it should be in the position of honor, at the speaker's right. It should never be used to cover the speaker's desk nor to drape over the front of the platform. Use Bunting.

Plate 12

When the flag is displayed in the body of the church, it should be from a staff placed in the position of honor at the congregation's right as they face the clergyman. The service flag, the State Flag, or other flag, should be at the left of the congregation. If in the chancel or on the platform, the Flag of the U. S. A. should be placed at the clergyman's right as he faces the congregation, and the other flags at his left. See plate 12.

Plate 13

When flags or pennants of states, cities or societies are flown on the same halyard with the flag of the U. S. A., the flag of the U. S. A. should always be at the peak. When flown from adjacent staffs the Flag of the U. S. A. should be hoisted first and lowered last.

Plate 14

When the flag is displayed with another flag as a picture with staffs crossed, the flag of the United States should be on the right; the flag's own right, with the staff over the staff of the other flag.

Plate 15

When a number of flags of States or cities, or pennants of societies are grouped and displayed from staffs with the Flag of the U. S. A. the latter should be at the center or at the highest point of the group.

Plate 16

When the Flag is displayed from a staff projecting horizontally or at an angle from the window sill, balcony or front of building, the union of the Flag should go clear to the peak of the staff unless the Flag is at half-staff. (When the Flag is suspended over a sidewalk from a rope, extending from a house to a pole at the edge of the sidewalk, the Flag should be hoisted out from the building toward the pole, the union first.)

Plate 17

Do not display the Flag of the U. S. A., with the union down, except as a signal of distress.

Plate 18

When displayed over the middle of the street, the Flag of the U. S. A. should be suspended vertically with the union to the north in an east and west street, or to the east in a north and south street.

Plate 19

When used in connection with the unveiling of a statue or monument, the Flag should form a distinctive feature during the ceremony; but the Flag itself should never be used as a covering for a statue.

Plate 20

Do not let the Flag of the United States touch the ground or the floor, or trail in the water.

Plate 21

When the Flag is placed upon the grave, see that it is left in such a position so that it will not touch the ground.

Plate 22

When the flag is used on a casket it should be placed so that the stars are at the head in the upper right hand corner (over the heart) looking from the foot. The flag should not be lowered into the grave, nor allowed to touch the ground. Carry the casket foot first.

Plate 23

Do not drape the Flag over the hood, top, sides or back of a vehicle, or of a railway train or boat. When the Flag is displayed on a motor car, the staff should be affixed firmly to the chassis, or clamped to the radiator cap.

Plate 24

When the Flag is made up as a badge the blue union with the stars is on the right side, the Flag's own right, the same position as if the Flag were displayed to public view.

Plate 25

The Shield of the United States. The shield of the United States has 13 vertical stripes, 7 white and 6 red with a blue chief without stars.

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FIRE DEPARTMENTS DISCUSSED BY NATIONAL FIRE PROTECTION ASSN.

Some Unfavorable Comments on Fire-Fighting Organizations—Meeting Held at Atlantic City, N J.

ONE angle of the thirty-second annual meeting of the National Fire Protection Association (International) held at Atlantic City, N. J., on May 7 to 10, was the criticism of fire departments by Secretary Franklin H. Wentworth, of the Association.

In his address, according to press reports, Mr. Wentworth spoke in part as follows:

"It is evident that in our field service we have the instrument for competently reducing the fire waste; but as we extend our knowledge of local conditions, situations are revealed that sometimes make our task even greater rather than less. Confronted by certain of our current field discoveries, our previous 30 years' activities often appear somewhat academic.

"In most cases what is particularly needed is merely the application of common sense. For example, without citing any special cases, we may assert that a number of the considerable fire losses of the past year were much larger than they need have been had the fires been competently and intelligently fought. While fire extinguishing apparatus has been standardized and developed to a high point of efficiency, there has been very limited standardization of the intelligent and efficient use of it.

"Our field experience has emphasized what was previously more or less of an assumption, that the value of standpipe and automatic sprinkler installations as logical extensions of the fire department equipment is very extensively ignored. In many cities the fire department connections to these facilities are neither known nor recognized by the fire departments; they are not even distinguished by any instructive marking. It would appear in putting forward programs of fire prevention that the item of fire extinguishment has not received the attention it deserves and that in addition to our efforts to establish fire department inspection and training schools for firemen one of our responsibilities should be to advance a definite and continuous campaign of education in the use by the department of the modern available facilities like standpipes and sprinkler systems.

"It is the high-light of our present effort to arouse the community to a realization of its fire dangers, and reveal to it the fact that it can overcome these dangers by giving thought to its local fire hazards and to the adequate use of its fire department. That seems at first a simple program, and it would be, were it not for local cross-currents of ignorance, prejudice and political selfishness."

A large number of committee reports were received, discussed and passed upon by the association, some of these being accepted either in their entirety or with revision, and others being turned back to the committees for revision.

Frank C. Jordan, Secretary of the Indianapolis Water Company, and Chairman of the Joint Fire Prevention Committee of the I. A. F. C., the American Water Works Association and the N. F. P. A., in his annual report declared that the cooperation of the fire and water departments of the various cities has done much to the lessening of the fire hazard.

Canada's fire loss in the last six years has decreased 30 per cent., mainly through the educational work of fire prevention bureaus, George F. Lewis, secretary of the Canadian Fire Prevention Committee, told the meeting.

C. S. Magruder, of the Columbus, Ohio, Fire Prevention Bureau, emphasized the necessity for more stringent arson laws. He declared that most of the State laws left loopholes for the escape of defendants and urged members of the association to work for the passage of the model arson law in their States. He said the former arson law in Ohio made it possible for a man to be hired to burn property and still escape conviction. What is needed now is a national arson association, so that professional firebugs can be traced and captured.

The increased fire hazard of multi-family houses and places where residences and business establishments are housed under one roof was cited by Robert J. Moulton, Assistant Secretary of the Committee on Zoning.

A new hazard was pointed out by Albert P. Pell, New York City, arising from the increase in the habit of smoking among women. He confessed that his committee had no remedy to suggest.

A demonstration was given on May 9 of the boardwalk high pressure system, under the auspices of the local fire department.

Drill Tower Completed in New Britain, Conn.—A drill tower to facilitate in the training of firemen, has been completed in new Britain, Conn. A regular drill master has been appointed.

Phoenixville, Pa., Fire Station Looted—While members of a Phoenixville, Pa., fire company were out fighting a fire, some petty thief walked off with the contents of the candy and tobacco fund and escaped in an auto owned by a fireman.

Directors of Eastern Association Meet

A meeting of the directors of the Eastern Association of Fire Chiefs, a division of the International Association of Fire Chiefs, was held in the Hotel Dennis, Atlantic City, N. J., on May 10. The meeting was primarily to arrange for the coming convention to be held in Philadelphia in October.

The following were present at the meeting: President C. W. Greenfield, Arlington, N. J.; Director John Kenlon, New York City; Chief Ross B. Davis, Philadelphia; Treasurer R. L. Smith, Pittsburgh; Director A. T. Alexander of Maryland (appointed in place of Chief August Emrich who declined); Director Frank E. Soule, Coatesville, Pa.; Director Wm. J. Lutz, Wilmington, Md.; Secretary J. H. Golden, Cohoes, N. Y.

Topics were assigned for the October convention. They are as follows:

General Fire Fighting, by Chief John Kenlon.

Dangerous and Defective Construction of Buildings in Case of Fire, Deputy Chief J. J. T. Waldron, New York City.

Benefits to Be Derived from Activities of School Children in Fire Prevention Work, by Chief R. L. Smith of Pittsburgh.

During the round table discussion, the chiefs will consider the relative merits of foam, carbon tetrachloride, carbon dioxide and other types of extinguishers, and also proper methods for testing this apparatus.

Due to pressure of other affairs, Chief Golden resigned as secretary of the association. T. Howell Johnson of Newark, N. J., was appointed to fill the vacancy.

New York State Chiefs Meet in June

The twenty-second annual meeting of the New York State Association of Fire Chiefs will be held in Troy, N. Y., on June 5 in conjunction with the nineteenth annual meeting of the New York State Conference of Mayors and other Municipal Officials. The meetings will be held at the Central Fire Station although the luncheons and the dinner conference has been arranged at the Hotel Hendrick Hudson.

The following program has been planned:

Tuesday, June 5, Morning Session

Opening of Convention—Chief John Gibson, President, Mount Vernon.
Welcome to State Fire Chiefs—Mayor Cornelius F. Burns, introduced by Chief Cornelius V. Casey, Troy Fire Department
Response in Behalf of Members of Association—Chief John Gibson, Mount Vernon.
Reading of Minutes of Previous Meeting—Chief J. H. Golden, Secretary-Treasurer, Cohoes.
Selection of Representative to Report at Last Joint Session.
Arson—Grover C. Darrow, National Board of Fire Underwriters.
12:30—"Get Acquainted" Luncheon, Hotel Hendrick Hudson.

Afternoon Session

The Eastern Association—Charles W. Greenfield, Arlington, N. J., President of New Jersey State Association of Fire Chiefs.
Ventilation of Buildings—Chief Chris W. Noll, Fire Chief, Poughkeepsie.
Cooperation of State Police With Village and Town Fire Departments—Captain Albert B. Moore, State Police, Troy.

Evening Session

7:30 p. m.—Joint Session of Conference and Association.

Wednesday, June 6, Morning Session

Rescue Squads—Chief E. J. Brown, Fire Department, Binghamton.
Fire Prevention—Chief R. D. Miller, Niagara Falls Fire Department.
High Pressure Systems—A. H. Thompson, City Engineer, Cohoes.

Afternoon Session

Oil-Burning Equipment—(Speaker to be announced).
Model Fire Ordinances—William P. Capes, Executive Secretary Mayors' Conference.
Round Table Discussion—General Fire Topics.
Reports and Election of Officers.

Evening Session

7:00 p. m.—Dinner Conference, Crystal Ballroom, Hotel Hendrick Hudson.

Thursday, June 7

10:00 a. m.—Joint Session of Conference and Association.
12:30 p. m.—Luncheon and Civic Celebration.

Pumper Tested in Lexington, Ky.—A new F. W. D. combination fire engine purchased by Lexington, Ky., for $12,500 was successfully tested by the Kentucky Actuarial Bureau.

Who Should Pay for Exposure Fires?

(*Continued from page* 408)

by Chas. F. T. Young, C. E., London, England, he particularly refers to carelessness and wilfullness as being the two best allies by whose influence fire exceeds its bounds and against which we find no provision made for restitution and punishment according to the origin of the fire. It is proper, he states, that punishment should be made for culpable carelessness.

An Ex-Fire Marshal on Personal Liability

In an address before the annual convention of the Illinois Firemen's Association, former State Fire Marshal John G. Gamber, said:

"As for the personal liability statute I believe it will be of more importance in reducing fires than any single piece of legislation. It is time we quit pitying people who have caused fires by their own carelessness. The only way to make people feel personally responsible as to fires is to hold them liable to the law. A man who has a preventable fire robs his neighbors, either through the medium of insurance or an unjustified use of the public fire department which all of us support. The whole city's safety may be jeopardized at a critical moment while the fire department is on the run to a fire which never should have occurred. Firemen may be injured and equipment damaged on such a run. Fire departments are not maintained to protect a man from the results of his negligence and when he calls upon the city in any such case he should be made to pay for the service. Under a personal liability statute this can be brought about."

Liability Laws in the States

The Common Law principle is that every man is responsible for damage to the property of his neighbor, resulting from carelessness.

Pennsylvania is the first State to exact such a law for cities of the second class; requiring a person to pay the cost of extinguishing or attempting to distinguish a fire, through criminal intent, carelessness or negligence, thereby reimbursing the city. Ohio has a similar law. Maryland has a law which specializes on landed property:

"Every individual or corporation that carelessly or negligently or wilfully, sets on fire or causes or procures to be set on fire, any woods, brush, grass, grain, or stubble on lands not their own, shall be guilty of a misdemeanor and upon conviction be punishable by a fine of not less than 25 or more than $1000 or imprisonment for 30 days or 1 year or both."

Reading from a copy of the Ruling Case Law of 1916 an opinion is expressed as follows: "There would seem to be no doubt that a State law has the power to impose absolute liability upon one causing loss of property by agencies necessarily destructive."

Laws for Forest Preservation

The several instances mentioned of statutes by States added to others similar in nature throughout the country, are applicable to forest preservation, primarily, and are excellent in their intention. There are also some cities that have copied the old English law that penalizes any one who has caused a fire through having an unclean chimney on his house or other building; the fine being $5 in each instance. Small in its way, but seemingly full of potentiality! Perhaps we may yet see an awakening to what those enlightened countries of Europe and Canada have considered a necessity.

All the countries cited in this article believe it essential to their welfare, considering their established national tendencies, to obey their own laws on general principles and each a homogeneous community. They think there should be a penalizing of those who are responsible for fires. It would, therefore, certainly seem that a people of such pronounced indifference to consequences, a people of naturally careless habits as are the citizens of the United States, such a law would hold accountable for their acts in causing fires and should be added to the statutes governing acts that are classed as criminal. As it is generally understood, crime is a grave offense against the law of the State. Negligence is the omission of one's duty. Criminal negligence is a grave omission of one's duty, involving injury to others. Who can limit the result of a fire? This matter of holding persons responsible for fires has been brought forward repeatedly in some form or another and those who appreciate its immense importance have naturally desired a similar law to the French or Canadian statutes to be enacted and enforced. The approval of such a powerful organization as the National Board of Fire Underwriters and its local Boards, together with the Fire Departments all over the country—of the passage of a penalizing law in each State should have great weight with the public that understands how vital it is to reduce the number of fires amounting in dollars consumed to five times the entire population of the whole country.

What's Burning?

(*Continued from page* 420)

SCRANTON, PA.—Benjamin Franklin School destroyed.....150
EMORY, VA.—Administration Bldg., Henry College..... 75
SPENCER, NEB.—Theatre and adj. property..... 50
COLLINS, WIS.—Vogt Furniture store and other property..... 30
GREER, S. C.—Grand Theatre damaged..... 25
CATSKILL, N. Y.—Business property and dwellings..... 125
MARSHALL, OKLA.—Several business establishments..... 25
MILWAKEE, WIS.—The Black building destroyed.....350
BURLINGTON, IOWA.—Honey Moon Confectionery..... 25
BEAVER FALLS, PA.—Plant of Citizens Printing Co..... 30
ATTICA, N. Y.—Garage of E. J. Seagert destroyed..... 25
PORTLAND, IND.—Plant of Portland Drain Tile Co..... 65
ENGLEWOOD, OHIO.—Plant of Alexander Industries..... 25

Fire Loss May 11

NASHUA, N. H.—Berg Shoe Store and adj. property..... 25
PRINCETON, W. VA.—Plant of Brown Brothers Lumber Co.. 100
LAUREL, MASS.—Eastman-Gardiner Lumber Co. mill..... 800
FREDERICKTOWN, PA.—Peter Bruzzi bakery destroyed..... 25
MOUNT PLEASANT, TEX.—Bowie County bridge—Sulphur River 25
HEIDENHEIMER, TEX.—High School bldg. destroyed..... 25
JACKSON, MICH.—Business property, Vandercook Lake Section 40
YOUNGSTOWN, OHIO.—Youngstown Country Club damaged.. 250
CHICAGO, ILL.—Schultz Baking Co. garage destroyed..... 25
MONROE, MICH.—Bldg. of Wilder-Strong Implement Co..... 90
TECUMSEH, MICH.—Business property and dwellings..... 60
SANATORIUM, N. C.—Dairy barn of State Sanatorium destroyed 40
WHITEVILLE, N. C.—Hayes Hotel and Vineland Ice plant.... 25
CONWAY, N. H.—Property of Harold Pendergast destroyed.... 30
VALMY, WISC.—Bldgs. in business section destroyed..... 40
AMBRIDGE, PA.—Plant of Citizens Printing Co. damaged.... 30
SOUTH BOSTON, MASS.—Colonial Can Co. plant damaged.... 40
WAUTOMA, WISC.—Waushara County courthouse destroyed... 200
ORANGE, TEX.—Orangefield School bldg. destroyed..... 25
FAYETTEVILLE, ARK.—Engr. Shop, University of Arkansas.. 100
SONORA, TEX.—Rutledge Cafe and adj. property..... 25
BLOOMINGTON, ILL.—J. E. Will building damaged..... 80
BELLEVILLE, N. J.—Office bldg. at 118 Washington Ave..... 40
MARSHFIELD, WISC.—S. Central Avenue business property.. 25
DETROIT, MICH.—Mfg. bldg. 14th & Howard Sts..... 300
HAGERSTOWN, MD.—Garage of Baltimore Discount Co..... 25
PORTSMOUTH, OHIO.—Plant of Basic Products Co..... 80
MEADVILLE, PA.—Carman Hotel on Conneaut Lake..... 25
COLCHESTER, CONN.—Amston Grain Mill of I. Turshan.... 50
ITHACA, MICH.—Winget's Market and adj. property..... 40
FORT PIERCE, FLA.—Colonial Hotel destroyed..... 70
JEFFERSON, N. H.—Waumbech Hotel, adj. property..... 400
BAKER, OREG.—Sheds of Oregon Lumber Co..... 100
OIL CITY, PA.—Business section damaged..... 400
MANILA, ARK.—G. O. Stuart Drug store and adj. property.. 40
KEEWATTIN, ONT.—Several residences destroyed..... 30
DE KALB, ILL.—Paraffin Plant of Nehring Elec. Works..... 150

Cedarhurst, L. I., Buys Fire Apparatus—The Woodhouse Manufacturing Co., has sold to the Lawrence-Cedarhurst Fire Department, Cedarhurst, L. I., N. Y., one combination hose equipped with booster and chemical apparatus.

Knoxville, Tenn., Inspected for Hazards—Sixty firemen of Knoxville, Tenn., spent six days inspecting the city for possible fire hazards. Their findings are being tabulated by Chief Sam Boyd for the use of the fire prevention inspector who will check back on places found to contain fire hazards.

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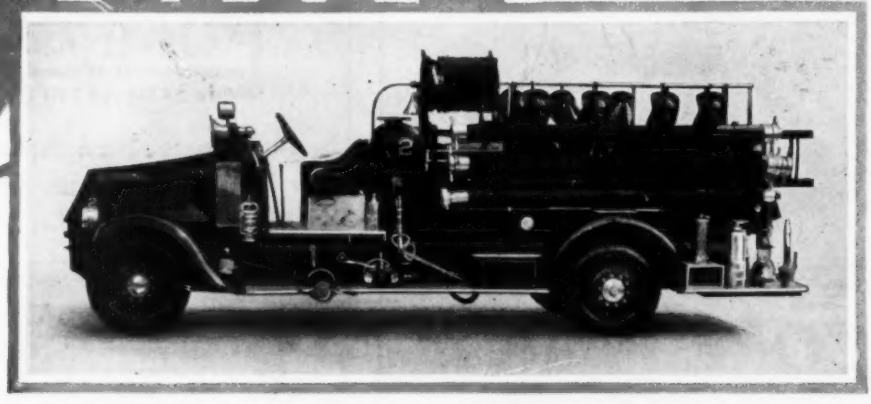

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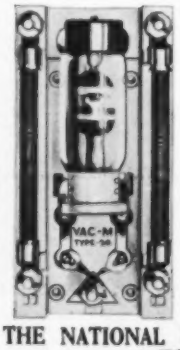

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FIRE DEPARTMENT ACTIVITIES

Hoquiam, Wash., Invites Bids—Bids have been invited in Hoquiam, Wash., for supplying fire apparatus and equipment.

Westport, Conn., Has New Apparatus—A new ladder truck has been delivered to Westport, Conn.

Waynesburg, Pa., to Buy Fire Apparatus—Waynesburg, Pa., voted to purchase a two-ton Graham truck equipped with chemical tanks and fire department accessories.

R. K. Barbor Re-Elected Chief of E. Randolph—R. K Barbor has been re-elected chief of East Randolph, N. Y., for the third time.

Santa Ana, Cal., to Have New Station—Contracts have been awarded for the construction of a new fire station in Santa Ana, Cal.

Cashmere Valley, Wash., Wants Protection—Several disastrous ranch fires in Cashmere Valley, Wash., has prompted agitation for rural fire protection.

Fire House Opened in Ventnor, N. J.—A new fire house has been opened in Ventnor, N. J. There was a firemen's band, speeches and following all this, refreshments were served.

Chicago Has Another New Company—Another new company has been ordered into service in Chicago, the twelfth since Commissioner A. W. Goodrich took office.

Funds Being Collected for Aledo, Apparatus—Funds are being collected in Aledo, Ill., for the purchase of a combined pumper and chemical car for rural fire protection.

Onawa, Ia., Firemen Guests of Club—The Community Club of Onawa, Ia., were hosts to the fire department at a banquet held early this month.

County Firemen to Meet in Dunmore, Pa.—The Six-County Firemen's Association will meet in Dunmore, Pa., a suburb of Scranton, on June 3.

Providence, R. I., to Have Drill School—An Officers training school and a drill school will be established in Providence, R. I.

Ex-Chief of Seneca Falls, N. Y., Dead—Horace N. Rumsey former fire chief of Seneca Falls, N. Y., died at his home at the age of eighty-four.

Officers' College Started in Portland, Me.—An officers' college has been started in the Portland, Me., Fire Department. A drill tower is to be erected soon.

Rochester, N. Y., Prohibits Fireworks—An ordinance has been passed in Rochester, N. Y., that prohibits the sale and use of fireworks. It permits fireworks to be used in public celebrations when under the supervision of the police departments.

Pelham, N. Y., Paid Chief Plan Opposed—Members of the volunteer fire department of Pelham Manor, N. Y., are opposed to the plan of having a paid fire chief. The volunteer firemen are planning for a legal battle, if necessary.

Plans Made for Wisconsin Tournament—Officials of the Wisconsin Firemen's Association met in Portage to make plans for the coming convention and tournament to be held at Kiel on June 20–22.

Votes for Pumpers But No Funds Available—North Abington, Mass., after a hectic meeting, voted to buy a Maxim 500-gallon pumper, the cost of which was not to exceed $6,500, but they failed to pass an appropriation to finance the purchase.

North Dakota Firemen to Meet in June—The annual convention of the North Dakota firemen will be held in Langdon June 5–7. H. L. Reade of Bismarck is secretary of the state association.

Gary to Have New Fire Alarm—Plans are being made for the proposed fire alarm system for Gary, Ind., by C. H. Shepherd of Chicago. His fee is 3½% of the total cost of the system.

Pennsylvania Firemen Meet in Steelton—A meeting of the Southeastern Pennsylvania Firemen's Association was held in Steelton, and several hundred firemen attended. The next quarterly meeting will be held in Lititz on July 19.

Grange Supports Community Apparatus Drive—The grange at Lanawee County, Mich., sponsored a movement for the purchase of fire apparatus to be housed in Adrian and manned by that department when needed.

Rudolph Miller Opens New York Office—Rudolph P. Miller, consulting engineer, has opened an office in the Architects' Building, 101 Park Avenue, New York City. He will do work on fire protection, building laws, zoning ordinances and so forth.

Chief Reeder of Decatur Improving—Chief Reeder of Decatur, Ala., is improving from injuries received when a car in which he was speeding to a fire struck a pole. He suffered a bruised chest and head, bruises and acid burns from the battery in the car.

Fire Hose in Use for Eighteen Years—Fond du Lac, Wis., has demonstrated that proper care will prolong the life of fire hose. They have hose in use for eighteen years which is still capable of going through a 250-pound pressure test. After each fire, the hose is carefully washed and dried.

Chief Emrich Urges Standardized Hose—Chief August Emrich of Baltimore, Md., spoke before the firemen of the Eastern Shore and urged them to work for standardization of fire hose and for the granting of right of way for fire apparatus on all Maryland streets and highways.

Eastchester, N. Y., Votes Bond Issue—The township of Eastchester, N. Y., will issue $75,000 bonds to purchase two pumpers and a 75-foot aerial ladder, and to erect a new fire station. From this amount, $5,000 will be used to complete the laying of fire alarm cables underground. The township owns the fire department which protects the villages of Bronxville, Tuckahoe and nearby communities.

Fire Chiefs' Club Meets in Pittsfield—The annual meeting of the Fire Chiefs' Club of Massachusetts will be held in Pittsfield, Mass., on May 19. Chief Shepard has suggested that members bring the ladies to this meeting as an automobile trip has been arranged for them around the Berkshire Hills while the meeting is being held. Chief William H. Hill of Belmont is secretary.

Many Get Promotion in Washington, D. C.—Twenty-four members of the Washington, D. C., department were advanced in rank. Six lieutenants were made captains, nine sergeants were advanced to lieutenants and nine privates were promoted to sergeants. The promotional examinations were the first held in accordance with an arrangement made last Fall by the Civil Service Commission and the District Commission.

Alpena, Mich., Chief Injured—Chief R. E. Wilson, of Alpena, Mich., and two firemen were seriously injured and six others barely escaped when two fire companies, on the way to a fire, collided at a street intersection. Both trucks were wrecked, one apparatus was thrown against a store and several firemen were hurled through a plate glass window. A parked sedan was also damaged but no one inside was hurt.

Bayonne, N. J., to Buy Apparatus—Following the large fire that destroyed the Bolt and Nut Company plant in Bayonne, N. J., the city has consented to invite bids for a 75-foot tractor drawn aerial ladder truck and two 1,000-gallon pumpers equipped with booster tanks. The suggestion for additional apparatus was made by Chief McLoughlin. At the time of the large fire, all companies were called to fight the blaze, and the main part of the city was left without fire protection.

Plaque to Honor Late Chief Rose—A plaque has been unveiled in Berkeley, Cal., to honor the memory of the late Chief Sydney Rose who served in the department for more than thirty-three years. The dedication took place on the first anniversary of the chief's death. The plaque has the phrase, "For thirty-tree years a faithful member of the Berkeley Fire Department. For eleven years its competent chief, a good and kindly man, a courageous, loyal public servant. A gift of his friends."

Drill Tower Erected in Urbana, Ill.—Contracts have been let for the construction of a concrete and steel drill tower to be erected at Champaign-Urbana, Ill., in time for the Fourth Annual Short Course to be held at the University of Illinois starting June 19. The tower will be sixty-five feet high. The state legislature has appropriated $11,000 for the erection of the tower and the purchase of necessary equipment. The tower idea originated with Roy Alsip, assistant chief of Champaign.

Test Made at Providence Skyscraper—Chief Charlesworth of Providence, R. I., conducted a test on the fifteenth and twenty-seventh floors of the Industrial Trust Company Building. Using only one line from a 1,000-gallon pumper, and with an engine pressure of 160 pounds, a pressure of fifty-four pounds was delivered on the fifteenth floor. With two lines, a pressure of 280 pounds was produced and 584 gallons was delivered from the nozzle on the twenty-seventh floor, four hundred feet above the street. Chief Charlesworth was very enthusiastic over the results.

PROPOSED IMPROVEMENTS

San Gabriel, Los Angeles Co., Calif.—Formation of county fire district being considered, in which event a motor pumper would be purchased. Reports state no definite plans completed.

Alhambra, Los Angeles Co., Calif.—City Commission passes resolution determining that public necessity demand erection of fire houses and acquisition of fire-fighting apparatus. Estimated cost $100,000. R. B. Wallace, City Clerk.

Kankakee, Kankakee Co., Ill.—City voted in favor of a $32,000 bond issue for purchase of fire equipment. Emile Goudreau, Chief of Fire Dept.

Cape May, Cape May Co., N. J.—Reports state City Council is having specifications prepared for a new 1,000 gal. motorized pumper for fire department. Paul A. Volcker, City Manager.

Bandon, Coos Co., Ore.—At recent meeting City Council discussed purchase of a pumper and the organization of a volunteer fire department.

Jersey Shore, Lycoming Co., Penn.—At election held April 24th, borough voted in favor of a $20,000 bond issue for purchase of fire apparatus. G. G. Ramor, Borough Secy.

Flossmoor, Cook Co., Ill.—At recent election village voted in favor of fire apparatus bonds to the amount of $12,500.

Verona, Oneida Co., N. Y.—Plans are being made for purchase of new apparatus for fire department here.

Santa Barbara, Santa Barbara Co., Calif.—City Attorney S. J. Bingham has been instructed to draw up ordinance calling for special election early in July to vote on $140,000 bond issue purchase of two pumpers and erection of two fire stations.

For Sale

Combination Pumping Engine and Hose Car

One Mack Model AC 500-gallon combination pumping engine and hose car, in excellent condition. The reason for wanting to dispose of this machine is because we have purchased a 1,000-gallon Mack. Apply:

Flower Hill Hose Co. No. 1.
Port Washington,
Long Island, N. Y.

5-2-16

CONVENTION DATES

May 18-19—FOUR-COUNTY FIREMEN'S ASSOCIATION. Annual Convention and Parade, Allentown, Pa. Secretary, P. J. McNally, Catasaqua, Pa.

May 30-31—SOUTH CAROLINA STATE FIREMEN'S ASSOCIATION. 23rd Annual Convention, Rock Hill, S. C. President, Chief Louis Behrens, Charleston, S. C.; Secretary, R. S. Hood, Sumter, S. C.

May 31—NEW JERSEY STATE FIRE CHIEFS' ASSOCIATION. Next meeting, Irvington, N. J. Secretary, William Exall, Chamber of Commerce Building, Newark, N. J.

June—NORTHWESTERN OHIO VOLUNTEER FIREMEN'S ASSOCIATION. 56th Annual Convention, Ashland, Ohio.

June 5-6—SOUTH DAKOTA FIRE CHIEFS' ASSOCIATION. Annual Convention, Vermillion, S. Dak. Secretary, Chief C. M. Johnson, Rapid City, S. Dak.

June 5-7—KENTUCKY STATE FIRE CHIEFS' AND FIREMEN'S ASSOCIATION. 10th Annual Convention, Middlesboro, Ky. Secretary, Captain S. G. Render, Fire Department Instructor, 303 Speed Building, Louisville, Ky.

June 5-7—NEW YORK STATE ASSOCIATION OF FIRE CHIEFS. 22nd Annual Convention, Troy, N. Y. (meeting in conjunction with Mayor's Conference). Secretary, Chief John H. Golden, Cohoes, N. Y.

June 5-7—OHIO FIRE CHIEFS' ASSOCIATION. 11th Annual Convention, Marion, Ohio. Secretary, Chief Philip J. Harty, Fire Department, Youngstown, Ohio, Sheet and Tube Company.

June 8-9—DELAWARE COUNTY FIREMEN'S ASSOCIATION. 22nd Annual Convention and Parade, Chester, Pa. Recording Secretary, Timothy McCary, Chester, Pa.

June 8-10—DAUPHIN COUNTY FIREMEN'S ASSOCIATION. 10th Annual Convention, Williamstown, Pa.

June 16—LEBANON COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Palmyra, Pa. Secretary, William I. Kutz, Box 233, Myerstown, Pa.

June 19-21—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 39th Annual Convention, Kingston, N. Y. Secretary, Chief Chris W. Noll, Poughkeepsie, N. Y., Fire Department.

June 19-22—ANNUAL SHORT COURSE OF FIRE PREVENTION, CONTROL AND EXTINGUISHMENT. 4th Course, University of Illinois, Champaign-Urbana, Ill. Secretary, Ill. Firemen's Association, Asst. Chief Roy W. Alsip, Champaign, Ill.

June 20—NASSAU COUNTY FIREMEN'S ASSOCIATION. Annual Tournament, Port Washington, N. Y.

June 20-22—WISCONSIN STATE FIREMEN'S ASSOCIATION. 41st Annual Convention and Tournament, Kiel, Wis. Secretary, E. Philip Mueller, Jefferson, Wis.

June 20-23—PROVINCIAL FEDERATION OF ONTARIO FIRE FIGHTERS. Annual Convention, King Edward Hotel, Toronto, Ont., Can. Secretary-Treasurer, David H. Lamb, 132 Bellevue Avenue (2) Toronto.

June 25—NORTHWEST FIREMEN'S ASSOCIATION. Semi-Annual Convention. Centerton, Ark. Secretary-Treasurer, F. M. Brock, Bentonville, Ark.

June 25-28—OKLAHOMA STATE FIREMEN'S ASSOCIATION. 34th Annual Convention and State Firemen's Training School, Blackwell, Okla. Secretary, Charles Slemp, 820 East 19th St., Oklahoma City.

June 26-29—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. 6th Annual Convention, Burlington, Vt. Secretary-Treasurer, Chief John W. O'Hearn, Watertown, Mass. Chairman, Exhibit Committee, Frank M. Tiffany, Gamewell Company, 1022 Commonwealth Avenue, Boston.

June 28-30—ALLEGHANY COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Tarentum, Pa.

July 3—MAPLE VALLEY FIREMEN'S ASSOCIATION. Tournament, Battle Creek, Ia.

July 4-6—DOMINION ASSOCIATION OF FIRE CHIEFS. 20th Annual Convention, Kingston, Ont. Secretary, Chief James Armstrong, Kingston.

July 5-7—SOUTHEASTERN FIRE CHIEFS' ASSOCIATION. Annual Convention, Atlanta, Ga. Secretary, Chief H. E. Whitener, Hickory, N. C.

July 10-12—MICHIGAN STATE FIREMEN'S ASSOCIATION. 54th Annual Convention, Port Huron, Mich. Secretary, H. L. Williams, Ludington, Mich.

July 11—DELAWARE VOLUNTEER FIREMEN'S ASSOCIATION. 8th Annual Convention, Hall of Carlisle Fire Company, Milford, Del. Secretary, Sam H. Carson, Dover, Del.

July 17-19—INDIANA FIREMEN'S ASSOCIATION and NO. IND. INDUST. & VOL. FIREMEN'S ASSO. Annual Convention, Terre Haute, Ind. Secretary Ind. F. Asso., Frank H. Miller, Fire Headquarters, Terre Haute.

July 18-21—SOMERSET COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Boswell, Pa. Secretary, J. R. Shanks, Rockwood, Pa.

July 27-28—NEW MEXICO STATE FIRE CHIEFS' ASSOCIATION. Annual Convention, Socorro, N. M. Secretary, Theodore A. Rosenwald, East Las Vegas, N. M.

Aug. 1-2—CENTRAL DISTRICT VOLUNTEER FIREMEN'S ASSOCIATION. Annual Convention, Clearfield, Pa. Secretary, John E. Johnson, DuBois, Pa.

Aug. 6-8—UTAH STATE FIREMEN'S ASSOCIATION. 21st Annual Convention, Bingham Canyon, Utah. (Date to be set at April meeting.) Secretary, Harris E. Anderson, Fire Headquarters, Salt Lake City, Utah.

Aug. 14-16—WISCONSIN PAID FIREMEN'S ASSOCIATION. 21st Annual Convention, Racine, Wis. Secretary, Hugh Corcoran, Superior, Wis.

Aug. 22-24—VIRGINIA STATE FIREMEN'S ASSOCIATION. 42nd Annual Convention, Ocean View, Va. Secretary, Chief J. B. Gordon, Newport News, Va.

Aug. 29-30—INDIANA FIRE CHIEFS' ASSOCIATION. Annual Convention, Fort Wayne, Ind.

Aug. 29-31—CALIFORNIA STATE FIREMEN'S ASSOCIATION. 6th Annual Convention, Reading, Cal. Secretary-Treasurer, H. E. Strasser, 1171 Tenth Street, San Diego, Cal.

Sept. 5-6—COLORADO STATE FIREMEN'S ASSOCIATION. 12th Annual Convention and Tournament, Rocky Ford, Col. Secretary, Clinton Turnbull, 303 Jacobson Bldg., Denver, Col.

Sept. 11-13—ILLINOIS FIREMEN'S ASSOCIATION. 41st Annual Convention, LaSalle, Ill. Secretary, Roy W. Alsip, Asst. Chief, Fire Department, Champaign, Ill.

Sept. 18-19—IOWA FIREMEN'S ASSOCIATION. 51st Annual Convention, Independence, Ia. Secretary, E. E. Parsons, Marion, Ia.

Oct. 1-5—PENNSYLVANIA STATE FIREMEN'S ASSOCIATION. 49th Annual Convention, Uniontown, Pa. Secretary, Charles F. Clark, 411 Bellevue Avenue, Wayne, Pa.

Oct. 1-6—PACIFIC COAST ASSOCIATION OF FIRE CHIEFS. 35th Annual Convention and School of Instruction for Firemen, Sacramento, Cal. Secretary, State Fire Marshal Jay C. Stevens, Merchants' Exchange Bldg., San Francisco, Cal.

Oct. 9-10—MISSOURI VALLEY ASSOCIATION OF FIRE CHIEFS. Annual Convention (tentative date). Secretary, Chief Ray Tiller, Waterloo, Ia.

Oct. 9-11—RAILWAY FIRE PROTECTION ASSOCIATION. Annual meeting, place to be selected later by Executive Committee. Secretary-Treasurer, R. R. Hackett, Baltimore & Ohio R. R., Baltimore, Md.

Oct. 11-12—GREAT LAKES ASSOCIATION OF FIRE CHIEFS. Annual Convention (tentative date). Secretary, Chief Frank C. McAuliffe, Chief of Patrols, 100 S. Desplaines St., Chicago, Ill.

Oct. 15-17—EASTERN ASSOCIATION OF FIRE CHIEFS (Eastern Division, I. A. F. C.) First Annual Convention, Bellevue-Stratford Hotel, Philadelphia, Pa. (Just preceding I. A. F. C. Convention.) Secretary, Chief J. H. Golden, Cohoes, N. Y.

Oct. 17-20—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 55th Annual Convention, Bellevue-Stratford Hotel, Philadelphia, Pa. Exhibits at Second Regiment Armory. Secretary, Chief James J. Mulcahey, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, Merchants' Exchange Bldg., San Francisco, Cal.; Chairman, Exhibits, Chief August Gerstung, Elizabeth, N. J.

Oct. 22-24—KANSAS STATE FIRE CHIEFS and FIREMEN'S ASSOCIATIONS and WOMEN'S AUXILIARY. 13th and 42nd Annual Conventions and 3d Meeting, respectively, Liberal, Kan. Secretary, Chief K. D. Doyle, Wamego, Kan.

Dr. Hunt, Head of Fire Surgeons, Dead

Dr. George C. Hunt, Police Surgeon of Chicago, Ill., and president of the National Association of Police and Fire surgeons and Medical Directors of Civil Service Commissions of the United States died on April 30th at Coral Gables, Fla., where he went both to regain his health and to attend the convention of the Mystic Shrine. He was a member of the Oriental Band of Medinah Temple of Chicago.

He is the second president of the Police and Fire Surgeons organization to die; Dr. E. G. Goodrich of Los Angeles, Cal., died February 6th last. Dr. Hunt, as vice president automatically became the president of the association upon the death of Dr. Goodrich. The new Acting President is Dr. George P. O'Malley of Cleveland, Ohio, who is chairman of the Board of Directors. It is now feared that the annual convention of the association scheduled for Chicago late next summer will probably be changed to another city.

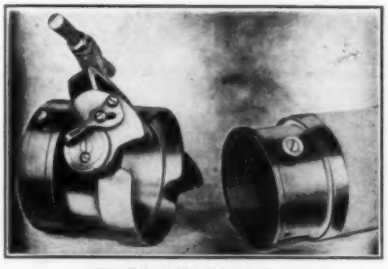
Dr. Hunt has been in the Chicago Police Department for eighteen years, although he served in one official capacity or another in that city for thirty-eight years. He was sixty-four years of age, and is survived by his widow, one daughter and two brothers, also physicians.

WM. JEROME DAILY.

Gamewell Receives Elwood Contract

Contrary to previous reports, contract for the installation of a fire alarm system in Elwood, Ind., has been awarded to the Gamewell Company for $13,273. Elwood is in Madison County not far from Anderson.

SPEEDY SCIENTIFIC!



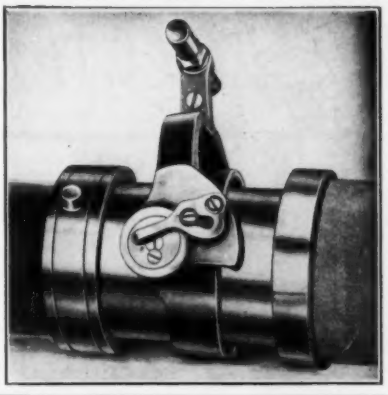
ECONOMICAL EFFICIENT!

This shift-connecting and disconnecting threadless coupling guarantees a speedy getaway when falling walls or uncontrolled fire threaten the safety of men and apparatus. Push the handle for a positive, leak-proof connection—Pull it and it disconnects instantly. This National Threadless Coupling eliminates all threading and misthreading—Solves all hard suction problems—Cannot Leak, Freeze or Jam — No wrenches—No Gasket Wear—Sturdy bronze construction—Built to outlast the apparatus—Easily installed on any pumper. Backed by five years of gruelling service. Write for descriptive literature.

Threadless Couplings for Fire Engines, Oil Tanks and Trucks, Oilhose, etc.

National Standard Threadless Coupling Corp.

Executive Office: 215-217 Beach 122nd Street, Rockaway Park, N. Y.



Triple Combinations

300-350 and 500 Gallons Capacity

Light and Heavy Hook and Ladder Trucks.
Miscellaneous Fire Fighting Equipment.
Fire Department Ladders.

Write us when interested

COMBINATION LADDER CO., Inc.
381 Fountain St. Providence, R. I.

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FIRE BOAT EQUIPMENT

Invincible and Callahan Nozzles

Fire Department Supplies

are in use throughout the country and giving unsurpassed service.

Every fire official should be fully acquainted with Morse equipment and have our catalog and other descriptive literature on file for ready reference whenever considering the purchase of new equipment.

You will find that it pays.

Write for Catalog

Andrew J. Morse & Son, Inc.
221 High St. Established 1837 Boston, Mass.

Quick-Acting Reliable

Anderson-Hale Improved

FIRE STATION DOOR OPENERS

Over 1,300 sets of Anderson-Hale Fire Station Door Openers are in successful use. They provide simple, durable, quick-acting doors that open inward. No obstruction to sidewalk. Attractive in appearance, cannot sag, closes tight, excludes cold, gives clear opening. Opens from driver's seat or from floor. Many repeat orders from users.

Write for complete information.

The Anderson Coupling & Fire Supply Co.
Mfrs. Motor Fire Equipment and Fire Supplies
Kansas City, Kansas

6 Patented Features

ERICK SIREN

Thorough Weather Protection
Erick Sirens do not clog up. Snow and ice cannot enter and stop sounding rotor. Completely protected and sheltered from outside influences.

Features That Prove Supremacy

Instant Alarm
Every telephone is a fire alarm station, permitting operator to sound alarm instantly, giving your fire department a chance to get the jump on the fire.

Universal Sound Projector
The Erick Sound Rotor and Deflector is built to instantly send a Fire Alarm.

Our Free Trial offer is made in all sincerity. We welcome your inquiry.

ERICK ELECTRIC SIREN CO.
STATE AND FILLMORE AVE., ST. PAUL, MINN.

KilSoot

TRADE MARK

Puts Out Chimney Fires

A better, safer and surer way to prevent and extinguish chimney fires is offered to fire chiefs and fire prevention bureaus in the use of "Kilsoot."

We repeat our offer to send liberal samples and full details regarding this remarkable chemical product — gladly furnished upon request.

"Make KilSoot Standard Equipment!"

KILSOOT CHEMICAL COMPANY
1834 Broadway, New York, N. Y.

New Victor Gas and Fume Mask

Better Rubber. Longer Life. Better Fitted. Moulded to Fit the Face. Better Vision. Renewable Lenses. Better Air. Better Work. Low Prices. High Quality.

Over 5,000 Victor Gas Masks in Service

Full Line Fire Dept. Supplies and Equipment.

New 43 Edition Catalog on Request

The Woodhouse Mfg. Co., Inc
156 Chambers St., New York

D. A. Woodhouse, Pres. and Gen. Mgr. George J. Kuss, Vice Pres. and Treas.

FALSE ALARMS

—Drawing by "Art" Espey

The Big-City Fireman's Conception of The Small-Town Fire Chief

Tom Mullens says that he always believes in his fellow men. But when the new rubber boots and coats were distributed last week, Tom was seen to be the first one to letter his name on his new equipment.

THE FLAPPER

Down at the village fire house,
The village flapper waits.
The flap, a clever kid is she,
Who never lacks her dates.

Laughing, smiling, petting,
All set for another bloke.
Each evening sees a man picked up,
Each morning sees him broke.

And so through life she lightly gives
Many a happy shout.
But yet the poor girl's never there
When the diamond rings come out.

It takes a manicurist to nail her man.

ANOTHER USE FOR THE BOX

The fire alarm box has been used for many purposes other than that for which it was originally installed. It has been used to deposit letters, for calling a taxi cab, but a resident of San Francisco has discovered still another use.

His wife became critically ill at 2 a. m. He needed a doctor at once. No doctor could be found at that hour. A box was pulled with the desired effect. Police rushed the patient to the hospital where an immediate operation was necessary.

MISINTERPRETED

Just before the promotional examination to lieutenant, all firemen get ambitious. In order to assist his men, the chief fitted up a library on fire department subjects, in the central station. He hung up a sign, "Only low talking permitted," but soon had to take it down when he found the boys had misinterpreted "low talking" for "low talk."

HOME CONVENIENCES

When a certain fire chief wants to get to a fire, nothing short of a traffic cop can stop him. That accounted for the chief rolling into the fire zone with the speed of a meteor. In an instant he was out of the car. In another second, the chauffeur was in front examining the motor.

"Gee, the motor is hot," he said absent mindedly.

Near by was one of those domesticated apartment dwellers.

"Well, why don't you turn off the radiator," he suggested.

"Was the burning theatre soon emptied?"

"Oh, yes. Quick as a flask."

A CURE-ALL

Unless you have gone to a convention on a chartered boat or a special train, you can't realize the number of friendships that are thus developed. On one lake trip, the conversation turned to how one makes new friends.

"Take my wife for example. I met her in a very funny way. On the way to a fire, a girl stepped out from behind a trolley car, and I ran into her. Later I married her."

The other thought for a moment.

"If every one had to do that, there wouldn't be so much reckless driving."

ANOTHER ON HAVANA

Convention time is coming around again. Those who were on the Havana side trip after the convention at New Orleans may or may not recall the incident of one of the delegates who returned from a tour of "Sloppy Joes" and other noted places.

All policemen in Havana who can speak English have a white arm band. One of this corps approached the delegate who was in front of a hotel, trying to stand erect.

"Will you help open my door for me, offisher?"

"Can't you open it yourself?"

"No, I can't. I don't remember which house it is and I haven't got the key."

THE REAL CAUSE

The vaudeville actress rushed back stage after receiving her curtain call. She noticed another artist in the wings waiting to go on.

"I panicked them that time, dearie," she said, flushed with her triumph.

"Maybe it wasn't you, honey," replied the other. "Maybe the theatre is on fire."

For absent mindedness all honors go to a carpenter who erected a home in Indianapolis. With a feeling of pride, the owner moved in and subsequent events made him think of a house warming party. He built a fire in his stove, and guests started to arrive all too soon. The house burst into flame. It was later discovered that the flue was a blind one and terminated in the attic.

YOU GUYS ARE DECIDEDLY WET! HAVE A LITTLE SMILE ON YOUR LIL OLD BOOTLEGGER FRIEND!
COME ON, GANG
OH, BOY
I'LL TAKE ONE BACK TO SLIM!
AN' SWEETHEART
JOY IDEAS

Drawing by "Art" Espey

A Very Merry and a Very Wet Time Was Had by All

Firemen who have seen more than one year's service will recall the kind hearted old lady who always appeared with a pot of steaming hot coffee for the brave laddies. But the fast and furious life of "we moderns" has caused one to look upon such a practice as being too ancient for the present time. In one eastern city, a kind hearted bootlegger (some are kind hearted) undertook to supply the cup that cheers for the firemen who were fighting a large blaze in an industrial plant. He secured a large tub filled with ice and placed therein more than two hundred bottles of beer. As the firemen, in relays, dashed from the burning building, he beckoned to them and supplied real, cold beer as first aid treatment for dry, feverish throats.

Contest Open to All Fire Chiefs Who Now Have

BLANCHARD ADJUSTABLE ANGLE NOZZLE TIPS

IN THEIR DEPARTMENTS

We will give a $35.00 Blanchard Adjuntable Angle Nozzle Tip to each of the writers of the four best letters received from March 7th to June 1st, stating the advantages of using these tips at fires. It is understood that all letters received in this contest can be published.

Send all letters to:

ARTHUR BLANCHARD

25 Hampshire St., Cambridge, Mass.

Fire Hose with Solid Woven Multiple Jacket

Quaker Fire Hose has stood the test of hard treatment in fire department service in the principal cities of the country. Its circular woven jacket and tough inner tube enable it to withstand the wear of dragging and impact of crushing, as well as the internal strains of high pressure service.

QUAKER CITY RUBBER CO.

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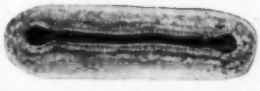
Branches: New York, Chicago, Pittsburgh, San Francisco

BI-LATERAL FIRE HOSE

THE BI-LATERAL FIRE HOSE CO.

230 West Randolph St., Chicago, Ill.



It is the only fire hose that never bursts at fires because pin-holes are responsible for sections bursting after it has been in service a few years.

Bi-Lateral hose can never have pin-holes. We guarantee it six years and furnish the Durobuilt improvement and rocker lug coupling without additional cost.

Eastman Improved Platforms and Holders

Write for Catalogue

are indispensable where high pressure service is required. With Eastman equipment any size streams can be easily handled by one man.

Eastman Nozzles and Deluge Sets

are designed by engineers who for over thirty years have specialized in equipment for producing fire-fighting streams that are unsurpassed for solidarity, distance and effectiveness.

Samuel Eastman Co.,

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HALE PUMPS

LONGER effective life, higher efficiency and greater freedom from trouble may be had by using Hale Dreadnaught Fire Pumps.

HALE FIRE PUMP CO.

Conshohocken, Pa.

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1320 Ridge Ave., Philadelphia, Pa.

Established 1864

Clay Automatic Door Opening Devices for Fire Station Doors Opening either In or Out. Save valuable minutes in getting to fires. Send for Bulletin.

EDDY

Fire Hydrants

Are given preference by so many fire protection and water works men because they know that more than half a century of experience go into their manufacture and they embody valuable and exclusive features.

Write for the Facts

EDDY VALVE CO.

Waterford, N. Y.

James B. Clow & Sons, Chicago Agents

MAXIM FIRE APPARATUS

If your apparatus is Maxim-built it will prove dependable and reliable at all times.

Complete information upon request.

MAXIM MOTOR COMPANY, Middleboro, Mass.

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Added Safety

STEEL wheels for chemical fire engines have been the subject of extensive research and experimental work for French & Hecht engineers.

As a result, French & Hecht are producing superior wheels for chemical fire engines and other equipment in that class. These wheels are mechanically correct and of stronger construction. They withstand the severe strains of emergencies and last longer than other types of wheels.

These wheels are made in large quantities in the most efficient factory in America specializing in steel wheels. So efficient are French & Hecht manufacturing facilities that a distinct saving in cost of wheels can be effected in most instances for manufacturers of wheeled equipment. Any information concerning wheels will be gladly supplied. Write.

The important features that distinguish French & Hecht Steel Wheels are:

Trussed spoke construction.

Each spoke is heated and forged in the hub with the end headed on the inside and a shoulder formed on the outside — similar to a boiler rivet.

The spoke is secured to the rim with a head riveted on the outside and a shoulder forged on the inside.

These are exclusively French & Hecht refinements.

FRENCH & HECHT

Wheel Builders Since 1888

DAVENPORT, IOWA SPRINGFIELD, OHIO

FRENCH & HECHT

STEEL WHEELS

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Fire Protection Equipment and Supplies

1 Acid Siphons.
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12 Banners, Trumpets, etc.
13 Battery Jars.
14 Battery Zincs for Fire Alarm Batteries.
15 Bells, Fire Alarm, Municipal.
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17 Boxes, Gongs, Reels, Registers, Fire Alarm.
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28 Coats & Suits, Firemen's Quick Hitch.
29 Combination Chemical & Hose Cars.
30 Cutting & Welding Equipment, Blow Torch.
31 Cutting & Welding Equipment, Electric.
32 Deluge Sets.
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34 Extinguishers, Fire, Soda & Acid.
35 Extinguishers, Fire, Tetrachloride.
36 Extinguishers, Fire, Foam.
37 Extinguishers for Chimney Fires.
38 Fire Boat Nozzle Equipment.
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41 Fire Exit Devices, Door Opening.
42 Fire Alarm Posts.
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45 First Aid Equipment.
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47 Flashlights, Hand.
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49 Gas Masks and Respirators.
50 Gas & Smoke Helmets.
51 Gasoline & Oil Handling Equipment.
52 Goggles, Firemen's.
53 Helmets, Metal, etc.
54 Hose Carts, Reels & Racks.

Waiting?

This page is here to make it *convenient* for you to get complete specifications and prices from *reliable* manufacturers of equipment needed for your department. It is *your* page to use freely without any obligation.

To get the information you want, just mail in the coupon below with your name and address and numbers that indicate the equipment listed below on which you would like descriptive literature.

We will then notify reliable manufacturers of your interest in such equipment and request that they send you complete information. They will gladly do this and it will be a pleasure for us to help you in this way. No charge whatever! Waiting?

For Information on Any Equipment Not Listed, Write on This Page or Use Separate Sheet.

55 Hose Clamps.
56 Hose, Fire.
57 Hose, Chemical.
58 Hose Holders.
59 Hose Jackets.
60 Hose Standardization Tools.
61 Hydrant Draining Pumps.
62 Hydrants, Fire.
63 Jacks for Fire Trucks.
64 Jacks, Shoring & Prying.
65 Ladders, Fire.
66 Lightning Arresters.
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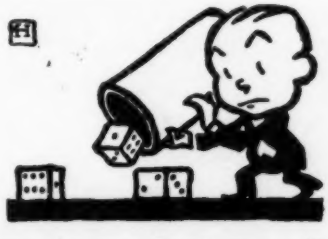

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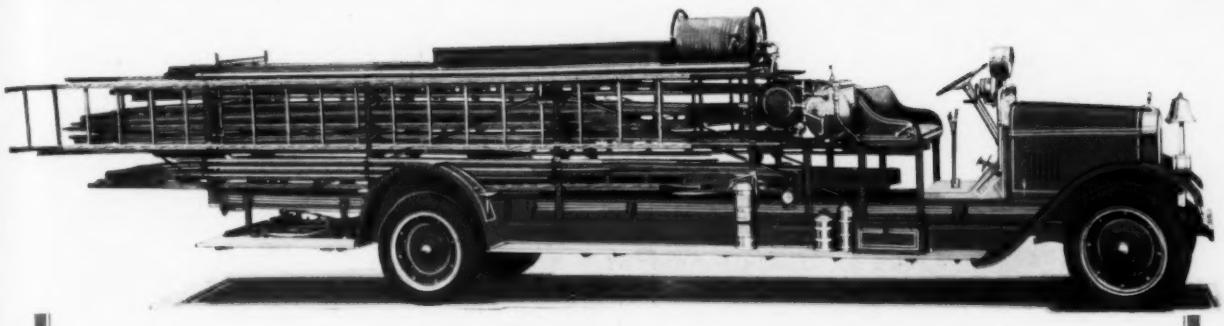

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